PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Rea Magnet Wire Company, Inc.
3600 E. Pontiac Street
Fort Wayne, Indiana 46803

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T003-6959-00014	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: Expiration Date:

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D.2.5 Testing Requirements [326 IAC 2-7-6(1), (6)][326 IAC 2-1.1-11]

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary magnet wire coating process.

Responsible Official:	Michael Connolly, President of Rea Engineered Wire Products Division
Source Address:	3600 East Pontiac Street, Ft. Wayne, Indiana 46803
Mailing Address:	P.O. Box 6128, Ft. Wayne, Indiana 46896-0128
SIC Code:	3357
County Location:	Allen
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) Two (2) GE-I wire enameling ovens with integral internal catalytic oxidizers, unit numbers 210-213 and 220-223, installed June 1989, with a maximum rating of 191 pounds of wire per hour each. Emissions shall be exhausted at stack/vents F-1 and F-2, respectively.

(b) One (1) GE-M wire enameling oven with an integral internal catalytic oxidizer, unit number 230-237, installed June 1989, with a maximum rating of 508 pounds of wire per hour each. Emissions shall be exhausted at stack/vent F-3.

(c) One (1) MAG HZ4A wire enameling oven with an integral internal catalytic oxidizer, unit number HZ4A, installed April 1988, with a maximum rating of 62 pounds of wire per hour. Emissions shall be exhausted at stack/vent E-7.

(d) Three (3) SICME wire enameling ovens with an integral internal thermal oxidizer, unit numbers 281-282, 283-284 and 285-286, installed in late 1996, with a maximum rating of 183 pounds of wire per hour each. Emissions shall be exhausted at stack/vents D-3, D-4 and D-5, respectively.

(e) Three (3) MAG HSO wire enameling ovens with integral internal catalytic oxidizers, unit numbers 551 (installed in January 1992), 552 and 553 (both in stalled November 1994), with a maximum rating of 0.64 pounds of wire per hour each. Emissions shall be exhausted at stack/vents C-3, C-4 and C-5 respectively.

(f) Seven (7) MAG HS1 wire enameling ovens with integral internal catalytic oxidizers, unit numbers 561, 562, 563, 564, 565, 566 and 567, installed November 1994, with a maximum rating of 0.91 pounds of wire per hour each. Emissions shall be exhausted at stack/vents C-6, C-8, C-10, C-12, C-14, C-16 and C-18, respectively.

(g) One (1) Weather-Rite V-22 wire enameling oven with an integral internal thermal oxidizer, unit number 290, installed in late 1998, with a maximum rating of 810 pounds of wire per hour. Emissions shall be exhausted at stack/vent D-8.

(h) Eleven (11) Rea H-9 wire enameling ovens with external catalytic oxidizers, unit numbers 243, 244, 245, 246, 247, 248, 250, 251, 252, 253 and 254, with a maximum rating of 6 pounds of wire per hour each. Emissions from units 243, 244, 245 and 246, shall be exhausted at stack/vent F-6. Emissions from units 247, 248, 250, and 254 shall be exhausted at stack/vent F-7. Emissions from units 251, 252, and 253 shall be exhausted at stack/vent F-8. Unit 243 was installed in June 1987. Unit 244 was installed in May 1987. Units 245 and 246 were installed in June 1989. Units 247 and 248 were installed in February 1992. Units 250 through 254 were installed in 1995.

(i) One (1) MOCO wire enameling oven with an external thermal oxidizer, unit number 260, installed before 1974, with a maximum rating of 429 pounds of wire per hour. Emissions shall be exhausted at stack/vent D-1.

(j) One (1) MOCO wire enameling oven with an external thermal oxidizer, unit number 270, installed before 1974, with a maximum rating of 571 pounds of wire per hour. Emissions shall be exhausted at stack/vent D-2.

(k) Six (6) Rea wire enameling ovens, unit numbers 540, 541, 542, 543, 544 and 550, installed before 1965, with a maximum rating of 0.26 pounds of wire per hour each. Emissions from units 540, 541, 542, 543 and 544 shall be exhausted at stack/vent C-2. Emissions from unit 550 shall be exhausted at stack/vent C-1.

(l) One (1) MOCO XR-1 experimental wire enameling oven with an integral internal catalytic oxidizer, installed before 1980. Emissions shall be exhausted at stack/vent E-3.

(m) Two (2) natural gas fired boilers with a maximum capacity of 16.7 million Btu per hour each, unit number PU4384 and CB266-500, installed before 1970. Emissions from the boilers shall be exhausted at stack/vent A-1 and A-2, respectively.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 [326 IAC 8-3-2] [326 IAC 8-3-5(a)].

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipments, cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2].

(c) Other activities or categories not previously identified with emissions equal to or less than thresholds requiring listing only:

Lead (Pb) = 0.2 ton per year
Sulfur Dioxide (SO2) = 10 tons per year
Nitrogen Oxides (NOx) = 10 tons per year
Carbon Monoxide (CO) = 25 tons per year
Particulate Matter (PM) = 5 tons per year

Volatile Organic Compounds (VOC) = 5 tons per year for equipment with an air pollution control device to comply with a provision of 326 IAC 8.10 tons per year for all other equipment.
Single HAP = 1 ton per year
Combination of HAP = 2.5 tons per year
Hydrogen Sulfide (H_2S) = 5 tons per year
Total Reduced Sulfur (TRS) = 5 tons per year
Reduced Sulfur Compounds = 5 tons per year
Fluorides = 5 tons per year

(1) BV glassline - glass coating line [326 IAC 6-3-2].

(2) USM glassline -glass coating line [326 IAC 6-3-2].

(3) USM2 glassline - glass coating line [326 IAC 6-3-2].

(4) Paint spray booth [326 IAC 6-3-2].

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; or

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination

that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.

(c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management

Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy any records that must be kept under the conditions of this permit;

(c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds of wire per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds of wire per hour shall not exceed 0.551 pounds of wire per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.11 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on October 21, 1996.

(b) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(c) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

(A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.

(c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.

(f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must

comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, any semi-annual report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(a) Two (2) GE-I wire enameling ovens with integral internal catalytic oxidizers, unit numbers 210-213 and 220-223, installed June 1989, with a maximum rating of 191 pounds of wire per hour each. Emissions shall be exhausted at stack/vents F-1 and F-2, respectively.

(b) One (1) GE-M wire enameling oven with an integral internal catalytic oxidizer, unit number 230-237, installed June 1989, with a maximum rating of 508 pounds of wire per hour each. Emissions shall be exhausted at stack/vent F-3.

(c) One (1) MAG HZ4A wire enameling oven with an integral internal catalytic oxidizer, unit number HZ4A, installed April 1988, with a maximum rating of 62 pounds of wire per hour. Emissions shall be exhausted at stack/vent E-7.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOCs)

(a) Potential to emit of VOC from emission units 210-213, 220-223, 230-237 and HZ4A are less than 25 tons per year per oven. Therefore, 326 IAC 8-2-8 will not apply. Any change or modification which may increase the potential emissions to 25 tons per year or more of volatile organic compounds at any oven must be approved by the Office of Air Quality before any such change may occur.

(b) This limit includes the evaporation of thinners being added to coatings to adjust viscosity, therefore, it is necessary to keep coating and solvent containers covered at all times to prevent solvent evaporation.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.3 Volatile Organic Compound (VOC)

(a) The integral internal catalytic oxidizer associated with each oven shall operate with an overall efficiency of not less than 80% at all times when the wire enameling ovens are in operation.

(b) The 80% efficiency for each oven is necessary to ensure that 326 IAC 8-2-8, 326 IAC 2-2 and 40 CFR 52.21 do not apply.

D.1.4 Volatile Organic Compound (VOC)

Compliance with the VOC usage limitations contained in D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Catalytic Oxidizer

The catalyst shall be replaced a minimum of every twelve (12) months provided that the catalytic oxidizer is achieving the required overall efficiency.

Record Keeping and Reporting [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.6 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1, the Permittee shall maintain records of the MSDS for each coating used on these ovens. VOC emissions shall be calculated using the VOC content of the worst case coating and the maximum amount of coating that can be used by the oven. The efficiency of the integral catalytic oxidizer, 80%, can be considered in the VOC emissions calculation. The resulting VOC emissions must be compared to the 25 tons per year applicability threshold of 326 IAC 8-2-8 to verify that 326 IAC 8-2-8 does not apply.

(b) To document compliance with condition D.1.5, the Permittee shall maintain a log of the replacement dates of the catalysts.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(d) Three (3) SICME wire enameling ovens with an integral internal thermal oxidizers unit numbers 281-282, 283-284 and 285-286, installed in late 1996, with a maximum rating of 183 pounds of wire per hour each. Emissions shall be exhausted at stack/vents D-3, D-4 and D-5, respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOCs)

(a) Potential to emit of VOC from emission units 281-282, 283-284 and 285-286 are less than 15 pounds per day per oven. Therefore, 326 IAC 8-2-8 will not apply. Any change or modification which may increase the potential emissions to 15 pounds per day or more of volatile organic compounds at any oven at any oven must be approved by the Office of Air Quality before any such change may occur.

(b) This limit includes the evaporation of thinners being added to coatings to adjust viscosity, therefore, it is necessary to keep coating and solvent containers covered at all times to prevent solvent evaporation.

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.2.3 Volatile Organic Compound (VOC)

(a) The integral internal thermal oxidizer associated with ovens 281-282, 283-284 and 285-286 must operate with an overall efficiency of not less than 96% at all times when the wire enameling ovens are in operation.

(b) The 96% overall efficiency for each oven is necessary to ensure that 326 IAC 8-2-8, 326 IAC 2-2 and 40 CFR 52.21 do not apply.

(c) The integral internal thermal oxidizers shall operate at or above 1250EF or a temperature determined during compliance tests to maintain a minimum 96% overall efficiency.

D.2.4 Volatile Organic Compound (VOC)

Compliance with the VOC usage limitations contained in D.2.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.2.5 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within fifty (50) months after issuance of this permit, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner.

(b) One representative oven from the three (3) SICME wire enameling wire ovens shall be tested. The oven tested shall not be an oven that has previously been tested.

(c) Additionally, if a higher VOC content coating is used or if the temperature falls below the 1250EF required minimum temperature it will be considered a violation unless the Permittee performs VOC testing utilizing methods as approved by the Commissioner to ensure compliance with the 96% overall efficiency at the lower temperature.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Monitoring

(a) Compliance with the 1250 F minimum temperature will be monitored by computer collected data generated continuously.

(b) Eight-hour average temperatures will be made available to IDEM upon request and one-hour temperature records will be made available within five business days from request.

(c) The temperatures will be reported based on an eight-hour average.

(d) The ovens shall operate with a five (5) degree buffer such that if the eight-hour average temperature falls within five (5) degrees of the minimum required temperature, corrective action shall be performed and one-hour temperatures shall be investigated to determine if any temperature fell below the actual minimum temperature.

(e) If a one-hour temperature is less than the established minimum temperature, this will be considered noncompliance.

Record Keeping and Reporting [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.7 Record Keeping Requirements

(a) To document compliance with Conditions D.2.1, the Permittee shall maintain records of the MSDS for each coating used on these ovens. VOC emissions shall be calculated using the VOC content of the worst case coating and the maximum amount of coating that can be used by the oven. The efficiency of the integral thermal oxidizer, 96%, can be considered in the VOC emissions calculation. The resulting VOC emissions must be compared to the 15 pound per day applicability threshold of 326 IAC 8-2-8 to verify that 326 IAC 8-2-8 does not apply.

(b) To document compliance with condition D.2.6, the Permittee shall maintain records of the computer collected data.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(e) Three (3) MAG HSO wire enameling ovens with integral internal catalytic oxidizers, unit numbers 551 (installed in January 1992), 552 and 553 (both in stalled November 1994), with a maximum rating of 0.64 pounds of wire per hour each. Emissions shall be exhausted at stack/vents C-3, C-4 and C-5 respectively.

(f) Seven (7) MAG HS1 wire enameling ovens with integral internal catalytic oxidizers, unit numbers 561, 562, 563, 564, 565, 566 and 567, installed November 1994, with a maximum rating of 0.91 pounds of wire per hour each. Emissions shall be exhausted at stack/vents C-6, C-8, C-10, C-12, C-14, C-16 and C-18, respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Volatile Organic Compounds (VOCs)

(a) Potential to emit of VOC emissions from emission units 551, 552, 553, 561, 562, 563, 564, 565, 566 and 567 are less than 15 pounds per day per oven. Therefore, 326 IAC 8-2-8 will not apply. Any change or modification which may increase the potential emissions to 15 pounds per day or more of volatile organic compounds at any oven must be approved by the Office of Air Quality before any such change may occur.

(b) This limit includes the evaporation of thinners being added to coatings to adjust viscosity, therefore, it is necessary to keep coating and solvent containers covered at all times to prevent solvent evaporation.

D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Record Keeping and Reporting [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.3 Record Keeping Requirements

(a) To document compliance with Condition D.3.1, the Permittee shall maintain records of the MSDS for each coating used on these ovens. VOC emissions shall be calculated using the VOC content of the worst case coating and the maximum amount of coating that can be used by the oven. The resulting VOC emissions must be compared to the 15 pound per day applicability threshold of 326 IAC 8-2-8 to verify that 326 IAC 8-2-8 does not apply.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(g) One (1) Weather-Rite V-22 wire enameling oven with an integral internal thermal oxidizer, unit number 290, installed in late 1998, with a maximum rating of 810 pounds of wire per hour. Emissions shall be exhausted at stack/vent D-8.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Volatile Organic Compounds [326 IAC 8-2-8]

(a) Pursuant to 326 IAC 8-2-8 (Magnet Wire Coating Operations), the volatile organic compound (VOC) content of electrically insulating varnishes or enamel applied to aluminum or copper wire for use in electrical machinery shall be limited to 1.7 pounds VOC per gallon of coating less water delivered to applicator.

(b) This limit includes the evaporation of thinners being added to coatings to adjust viscosity, therefore, it is necessary to keep coating and solvent containers covered at all times to prevent solvent evaporation.

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.4.3 Volatile Organic Compound (VOC)

(a) The integral internal thermal oxidizer associated with oven 290 shall operate with an overall efficiency of not less than 95.77% at all times when the wire enameling oven is in operation.

(b) The 95.77% overall efficiency for each oven is necessary to ensure that 326 IAC 2-2 and 40 CFR 52.21 do not apply.

(c) The integral internal thermal oxidizers shall operate at or above 1250 F or a temperature determined during compliance tests to maintain a minimum 95.77% overall efficiency.

(d) The VOC content of coatings applied to wire shall not exceed 7.21 pounds VOC per gallon of coating less water. This is equivalent to a VOC content of 1.7 pounds VOC per gallon of coating less water after the affect of the internal thermal oxidizer.

D.4.4 Volatile Organic Compound (VOC)

Compliance with the VOC usage limitations contained in D.4.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.4.5 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within fifty (50) months after issuance of this permit, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner.

(b) Additionally, if a higher VOC content coating is used or if the temperature falls below the 1250EF required minimum temperature it will be considered a violation unless the

Permittee performs VOC testing utilizing methods as approved by the Commissioner to ensure compliance with the 95.77% overall efficiency at the lower temperature.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.6 Monitoring

(a) Compliance with the 1250 F minimum temperature will be monitored by computer collected data generated continuously.

(b) Eight-hour average temperatures will be made available to IDEM upon request and one-hour temperature records will be made available within five business days from request.

(c) The temperatures will be reported based on an eight-hour average.

(d) The ovens shall operate with a five (5) degree buffer such that if the eight-hour average temperature falls within five (5) degrees of the minimum required temperature, corrective action shall be performed and one-hour temperatures shall be investigated to determine if any temperature fell below the actual minimum temperature.

(e) If a one-hour temperature is less than the established minimum temperature, this will be considered noncompliance.

Record Keeping and Reporting [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.7 Record Keeping Requirements

(a) To document compliance with condition D.4.1, the Permittee shall maintain records of material safety data sheets (MSDS) to verify the VOC content of each coating material and solvent used.

(b) To document compliance with condition D.4.6, the Permittee shall maintain records of the computer collected data.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.5 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(h) Eleven (11) Rea H-9 wire enameling ovens with external catalytic oxidizers, unit numbers 243, 244, 245, 246, 247, 248, 250, 251, 252, 253 and 254, with a maximum rating of 6 pounds of wire per hour each. Emissions from units 243, 244, 245 and 246, shall be exhausted at stack/vent F-6. Emissions from units 247, 248, 250, and 254 shall be exhausted at stack/vent F-7. Emissions from units 251, 252, and 253 shall be exhausted at stack/vent F-8. Unit 243 was installed in June 1987. Unit 244 was installed in May 1987. Units 245 and 246 were installed in June 1989. Units 247 and 248 were installed in February 1992. Units 250 through 254 were installed in 1995.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Site Specific RACT [326 IAC 8-1-5]

Pursuant to 326 IAC 8-1-5 and CP #003-9913-0014, issued October 28, 1998, each H-9 magnet wire coating oven (units 247, 248, and 250 through 254) shall achieve the following:

(a) The VOC content of the coatings used shall not exceed 7.64 pounds per gallon coating as delivered to the applicator, excluding water.

(b) The catalyst shall be replaced once every six months to ensure that the catalytic oxidizer is achieving the required overall efficiency.

(c) VOC emissions shall be limited to 4.7 pounds of VOC per gallon of coating and 0.89 tons per year each.

(d) The capture system shall be operated in such a manner as to maintain an overall control efficiency of not less than 90%.

(e) The capture system fan shall be operated at times when the ovens are in operation.

D.5.2 Volatile Organic Compounds

(a) Potential to emit of VOC from emission units 243, 244, 245 and 246 are less than 25 tons per year. Therefore, 326 IAC 8-2-8 will not apply. Any change or modification which may increase the potential emission to 25 tons per year or more of volatile organic compounds at any oven must be approved by the Office of Air Quality before any such change may occur.

(b) The limit includes the evaporation of thinners being added to coatings to adjust viscosity, therefore, it is necessary to keep coating and solvent containers covered at all times to prevent solvent evaporation.

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.5.4 Volatile Organic Compound (VOC)

(a) Pursuant to 326 IAC 8-1-5 and CP #003-9913-00014 issued October 28, 1998, the external catalytic oxidizer associated with ovens 247, 248, and 250 through 254 shall operate with an overall efficiency of not less than 90% at all times when the wire enameling oven is in operation.

(b) The external catalytic oxidizer associated with ovens 247, 248, and 250 through 254 shall be operated at all times when the ovens are in operation.

D.5.5 Volatile Organic Compound (VOC)

Compliance with the VOC usage limitations contained in D.5.1 and D.5.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.5.6 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within fifty (50) months after issuance of this permit, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner.

(b) One representative oven from 247, 248 and 250 through 254 shall be tested. The oven tested shall not be an oven that has previously been tested. The test shall be done within the last 2 months of the life of the catalyst.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.7 Catalytic Oxidizer

The catalyst on ovens 247, 248, and 250 through 254 shall be replaced a minimum of every six (6) months provided that the catalytic oxidizer is achieving the required overall efficiency.

Record Keeping and Reporting [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.8 Record Keeping Requirements

(a) To document compliance with Conditions D.5.1, the Permittee shall maintain records of material safety data sheets (MSDS) to verify the VOC content of each coating material and solvent used.

(b) To document compliance with Condition D.5.2, the Permittee shall maintain records of the MSDS for each coating used on in these ovens. VOC emissions shall be calculated using the VOC content of the worst case coating and the maximum amount of coating that can be used by the oven. The resulting VOC emissions must be compared to the 25 tons per year applicability threshold of 326 IAC 8-2-8 to verify that 326 IAC 8-2-8 does not apply.

(c) To document compliance with condition D.5.7, the Permittee shall maintain a log of the replacement dates of the catalysts.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(i) One (1) MOCO wire enameling oven with an external thermal oxidizer, unit number 260, installed before 1974, with a maximum rating of 429 pounds of wire per hour. Emissions shall be exhausted at stack/vent D-1.

(j) One (1) MOCO wire enameling oven with an external thermal oxidizer, unit number 270, installed before 1974, with a maximum rating of 571 pounds of wire per hour. Emissions shall be exhausted at stack/vent D-2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Site Specific RACT [326 IAC 8-1-5]

Pursuant to 326 IAC 8-1-5 and CP #003-9913-0014, issued October 28, 1998, magnet wire coating ovens 260 and 270 shall permanently reduce VOC emissions by 85%. Each oven shall have the following corresponding limitations:

(a) The thermal oxidizer for oven 260 shall be operated at or above the temperature determined during compliance tests to maintain a minimum 85% overall efficiency.

(b) The thermal oxidizer for oven 270 shall be operated at or above the temperature determined during compliance tests to maintain a minimum 85% overall efficiency.

D.6.2 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirement

D.6.3 Volatile Organic Compound (VOC)

(a) The thermal oxidizer associated with each oven shall operate with an overall efficiency of not less than 85% at all times when the wire enameling ovens is in operation.

(b) The thermal oxidizer associated with each oven shall be operated at or above 1250EF or a temperature determined during compliance tests to maintain a minimum 85% overall efficiency.

D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Within fifty (50) months after issuance of this permit, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner.

(b) One representative oven from the wire enameling wire ovens shall be tested. The oven tested shall not be an oven that has previously been tested.

(c) If the temperature falls below the 1250EF required minimum temperature it will be considered a violation unless the Permittee performs VOC testing utilizing methods as approved by the Commissioner to ensure compliance with the 85% overall efficiency at the lower temperature.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.5 Monitoring

(a) Compliance with the 1250 F minimum temperature will be monitored by computer collected data generated continuously.

(b) Eight-hour average temperatures will be made available to IDEM upon request and one-hour temperature records will be made available within five business days from request.

(c) The temperatures will be reported based on an eight-hour average.

(d) The ovens shall operate with a five (5) degree buffer such that if the eight-hour average temperature falls within five (5) degrees of the minimum required temperature, corrective action shall be performed and one-hour temperatures shall be investigated to determine if any temperature fell below the actual minimum temperature.

(e) If a one-hour temperature is less than the established minimum temperature, this will be considered noncompliance.

Record Keeping and Reporting [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.6.6 Record Keeping Requirements

(a) To document compliance with Condition D.6.5, the Permittee shall maintain records of the computer collected data.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(k) Six (6) Rea wire enameling ovens, unit numbers 540, 541, 542, 543, 544 and 550, installed before 1965, with a maximum rating of 0.26 pounds of wire per hour each. Emissions from units 540, 541, 542, 543 and 544 shall be exhausted at stack/vent C-2. Emissions from unit 550 shall be exhausted at stack/vent C-1.

(l) One (1) MOCO XR-1 experimental wire enameling oven with an integral internal catalytic oxidizer, installed before 1980. Emissions shall be exhausted at stack/vent E-3.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Volatile Organic Compound (VOC)

(a) The seven (7) wire coating ovens, unit numbers, 540, 541, 542, 543, 544, 550 and XR-1 were constructed prior to 1980, therefore, there are no applicable VOC requirements for these emission units.

(b) Any change or modification which may increase potential emissions at any of the seven (7) wire enameling ovens, unit numbers 540, 541, 542, 543, 544, 550 and XR-1, by amounts that exceed the permitting thresholds under 326 IAC 2-1.1-3(d) shall comply with the requirements of 326 IAC 2-7-10.5.

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(m) Two (2) natural gas fired boilers with a maximum capacity of 16.7 million Btu per hour each, unit number PU4384 and CB266-500, installed before 1970. Emissions from the boilers shall be exhausted at stack/vent A-1 and A-2, respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Particulate Matter (PM) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3, (Particulate emissions limitations for sources of indirect heating), the particulate matter emissions from the two (2) 16.7 MMBtu per hour natural gas fired boilers shall be limited to 0.8 pounds per MMBtu each.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.8.2 Reporting Requirements

The Permittee shall semi-annually certify, on the form provided, that natural gas was fired in the boilers at all times during the report period. Alternatively, the Permittee shall report the number of days during which alternative fuel was burned during the report period.

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities

(a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.9.2 Volatile Organic Compounds (VOC)

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Rea Magnet Wire Company
Source Address: 3600 Pontiac Street, Ft. Wayne, Indiana 46803
Mailing Address: 3600 Pontiac Street, Ft. Wayne, Indiana 46803
Part 70 Permit No.: T003-6959-00014

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Rea Magnet Wire Company
Source Address: 3600 Pontiac Street, Ft. Wayne, Indiana 46803
Mailing Address: 3600 Pontiac Street, Ft. Wayne, Indiana 46803
Part 70 Permit No.: T003-6959-00014

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)
- C The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- C The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Rea Magnet Wire Company
Source Address: 3600 Pontiac Street, Ft. Wayne, Indiana 46803
Mailing Address: 3600 Pontiac Street, Ft. Wayne, Indiana 46803
Part 70 Permit No.: T003-6959-00014

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Report period
Beginning: _____
Ending: _____

Boiler Affected	Alternate Fuel	Days burning alternate fuel From	To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Rea Magnet Wire Company
Source Address: 3600 Pontiac Street, Ft. Wayne, Indiana 46803
Mailing Address: 3600 Pontiac Street, Ft. Wayne, Indiana 46803
Part 70 Permit No.: T003-6959-00014

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name:	Rea Magnet Wire Company
Source Location:	3600 Pontiac Street, Ft. Wayne, Indiana 46803
County:	Allen
SIC Code:	3357
Operation Permit No.:	T003-6959-00014
Permit Reviewer:	ERG/RM

On February 6, 2001, the Office of Air Quality (OAQ) had a notice published in the Fort Wayne Journal Gazette in Fort Wayne, Indiana, stating that Rea Magnet Wire Company had applied for a Part 70 Operating Permit to operate a stationary magnet wire coating process. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Response to Rea Magnet Wire Company comments

Comment 1: Condition D.1.5

This condition should be deleted since an 80% efficiency is claimed for the catalyst and no testing should be required.

Response to Comment 1:

IDEM agrees that because the ovens listed in Section D.1. have a potential to emit less than 25 tons per year with integral controls, and they are claiming an efficiency of less than 85% on each of the catalytic oxidizers, testing is not necessary. In addition, the source is required to replace the catalyst every twelve months, which is more frequent than the typical catalyst replacement time frame of two years. The source is also already required to test one group of ovens with catalytic oxidizers. Based on these reasons and the fact that the inspector did not object, Condition D.1.5 was removed from the permit and the remaining sections were re-numbered accordingly. The changes to the permit are as follows:

~~D.1.5 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]~~

~~(a) Within twenty four (24) months after issuance of this permit, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner.~~

~~(b) One of the ovens described in the facility description in this section shall be tested. The oven tested shall not be an oven that has previously been tested. The test shall be done within the last 2 months of the life of the catalyst.~~

Comment 2: Condition D.3.1(a)

IDEM should modify this condition related to when approval is required for changes to the units. The words "at any oven" should be added after the phrase "volatile organic compounds." This change would be consistent with how this phraseology is used throughout the rest of the permit. In addition, this change would be consistent with the applicable requirements.

Response to Comment 2:

In order to clarify that a change at any of the ovens requires OAQ approval, and to be consistent throughout the permit, Condition D.3.1(a) has been modified as follows:

D.3.1 Volatile Organic Compounds (VOCs)

(a) Potential to emit of VOC emissions from emission units 551, 552, 553, 561, 562, 563, 564, 565, 566 and 567 are less than 15 pounds per day per oven. Therefore, 326 IAC 8-2-8 will not apply. Any change or modification which may increase the potential emissions to 15 pounds per day or more of volatile organic compounds **at any oven** must be approved by the Office of Air Quality before any such change may occur. ~~at any oven~~

Comment 3: Condition D.4.3(d)

This language relating to the magnet wire RACT rule should indicate that the emission limit applies to "coatings applied to wire," not to "electrically insulating varnishes or enamel applied to aluminum or copper wire for use in electrical machinery." This change would be consistent with the applicable regulation. That regulation limits "coatings" for affected processes, and this provision should reflect that regulation.

Response to Comment 3:

The intent of condition D.4.3(d) is to describe how the source can demonstrate compliance with the VOC limit in Condition D.4.1, and to give the equivalent VOC content taking into account the affects of the internal thermal oxidizer. Condition D.4.1 applies the limit to "electrically insulating varnishes or enamel applied to aluminum or copper wire for use in electrical machinery," which is consistent with the applicable requirement, 326 IAC 8-2-8. Changing the language in Condition D.4.3(d) as suggested by the source, will clarify the intent of the paragraph. Changes to the permit are as follows:

(d) The VOC content of **coatings** ~~electrically insulating varnishes or enamel~~ applied to ~~aluminum or copper~~ wire ~~for use in electrical machinery~~ shall not exceed 7.21 pounds VOC per gallon of coating less water. This is equivalent to a VOC content of 1.7 pounds VOC per gallon of coating less water after the affect of the internal thermal oxidizer.

Comment 4: Condition D.5.2(a)

This condition relating when approval is necessary for modifications to the covered units should include the phrase "at any oven" to be consistent with the applicable requirements and consistent with how this language in the rest of the permit. This condition relates to when approvals are necessary and refers to increases in potential emissions to 25 tons or more per year of VOCs. That limitation applies on an oven by oven basis.

Response to Comment 4:

In order to clarify that a change at any of the ovens requires OAQ approval, and to be consistent throughout the permit, Condition D.5.2(a) has been modified as follows:

D.5.2 Volatile Organic Compounds

(a) Potential to emit of VOC from emission units 243, 244, 245 and 246 are less than 25 tons per year. Therefore, 326 IAC 8-2-8 will not apply. Any change or modification which may increase the potential emission to 25 tons per year or more of volatile organic compounds **at any oven** must be approved by the Office of Air Quality before any such change may occur.

Comment 5: Condition D.7.1(b)

This condition relating to when approvals are required for changes to certain units should be modified to indicate that approvals are only required when the permitting thresholds are exceeded. In addition, the condition should reference oven 550 instead of oven 545 because oven 545 does not exist.

Response to Comment 5:

The change suggested by Rea Magnet clarifies that if a modification to any of the ovens increases the emissions above significance thresholds, they must comply with the requirements for making a source modification. IDEM agrees that this clarification is appropriate. In addition, the ID number for oven 545 was changed to 550. Changes to the permit are as follows:

(b) Any change or modification which may increase potential emissions **at any of** ~~from~~ the seven (7) wire enameling ovens, unit numbers 540, 541, 542, 543, 544, ~~545~~**550** and XR-1**, by amounts that exceed the permitting thresholds under 326 IAC 2-1.1-3(d)** shall **comply with the requirements of 326 IAC 2-7-10.5** ~~require prior approval from the OAQ before such change may occur~~.

Comment 6: Condition D.8.2

This condition relating to semi-annual certifications that natural gas is fired on the boilers should be deleted because natural gas is the only fuel that the boilers are capable of combusting.

Response to Comment 6:

The certification form for the natural gas-fired boiler is a standard form required for all natural gas-fired boilers. The intent of the form is to avoid requiring visible emission notations for natural gas-fired boilers. In the past, visible emission notations were required for all boilers. It was determined that because natural gas is significantly cleaner than other fuels, boilers that used natural gas would not be required to perform compliance monitoring, as long as they certified that they used natural gas. Therefore, the certification form will be required for the two natural gas-fired boilers instead of requiring visible emission notations. No change was made as a result of this comment.

Comment 7: Technical Support Document, page 4

The reference to the Fenn Mill in item (aa)(12) should be modified to indicate that the Fenn Mill uses mineral “spirits,” not mineral “oil.”

Response to Comment 7:

After further correspondence with the source, it was determined that there are two mills that should be included as insignificant units. The Fenn Mill, which is listed in the TSD does use mineral spirits instead of mineral oil and has a maximum potential to emit of approximately 8 tons of VOC per year. The Three Stand Mill, which was not included in the TSD, previously used mineral spirits, but changed to using a water-based material in order to not be subject to 326 IAC 8-1-6. It currently has a maximum potential to emit of approximately 4 tons of VOC per year. Neither unit emits any HAPs. Both of these units are considered

insignificant units because their potential to emit is below significance levels. There are no rules that are specifically applicable to these units, and as a result, they are not included in the permit. The requested clarification affects only the TSD. The OAQ prefers that the TSD reflect the permit at public notice. Changes to the permit or the TSD that occur after public notice are documented in this Addendum to the TSD. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Therefore, no change will be made as a result of this comment.

Comment 8: Technical Support Document, page 9

The State Rule Applicability for Individual Facilities at the bottom of that page should remove the references to oven 549 since that oven does not exist.

Response to Comment 8:

The requested change is in the TSD only, and does not affect the permit. The OAQ prefers that the TSD reflect the permit at public notice. Changes to the permit or the TSD that occur after public notice are documented on this Addendum to the TSD. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Therefore, no change will be made as a result of this comment.

Comment 9: Technical Support Document, page 10

The reference in the 10th paragraph related to 326 IAC 8-1-6 should indicate that the Fenn Mill uses mineral "spirits," not mineral "oil." Also, the suggestion that a change to mineral spirits would trigger 326 IAC 8-1-6 is incorrect since this facility already utilizes mineral spirits and it does not trigger 326 IAC 8-1-6.

Response to Comment 9:

As is discussed in the response to Comment 7, there are actually two mills that should be considered insignificant activities: the Fenn Mill using mineral spirits and the Three Stand Mill using a water-based material. Both these activities have a potential to emit VOC less than 25 tons per year. As a result, 326 IAC 8-1-6 does not apply. Any change or modification to either activity which would increase the potential to emit to 25 tons per year or more must be approved by the Office of Air Quality before such change occurs. The requested clarification affects only the TSD. The OAQ prefers that the TSD reflect the permit at public notice. Changes to the permit or the TSD that occur after public notice are documented on this Addendum to the TSD. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Therefore, no change will be made as a result of this comment.

Comment 10: Technical Support Document, page 12

Paragraph 2 which describes compliance monitoring requirements identifies several ovens which are not required to have catalysts replaced every twelve months and therefore should be removed from that sentence. Specifically, ovens 243, 244, 245, 246, 551, 552, 553, 561, 562, 563, 564, 565, 566, and 567 do not require annual catalyst replacement.

Response to Comment 10:

The OAQ prefers that the TSD reflect the permit at public notice. Changes to the permit or the TSD that occur after public notice are documented on this Addendum to the TSD. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The requested change is in the TSD only, and does not affect the permit. Therefore, no change will be made as a result of this comment.

Additional Review Made by IDEM

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

Section A and D

1. It was unclear from the unit descriptions of the various ovens at this source what the maximum rating was in pounds of. The words "of wire" were inserted into each description to make it clear that the maximum rating for each oven is in pounds of wire per hour. Also, in Section A..2(d), the word "oxidizer" was made plural to clarify that each of the three SICMI wire enameling ovens has an integral internal thermal oxidizer. Each of these changes were also made in the appropriate D Sections.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) Two (2) GE-I wire enameling ovens with integral internal catalytic oxidizers, unit numbers 210-213 and 220-223, installed June 1989, with a maximum rating of 191 pounds **of wire** per hour each. Emissions shall be exhausted at stack/vents F-1 and F-2, respectively.

(b) One (1) GE-M wire enameling oven with an integral internal catalytic oxidizer, unit number 230-237, installed June 1989, with a maximum rating of 508 pounds **of wire** per hour each. Emissions shall be exhausted at stack/vent F-3.

(c) One (1) MAG HZ4A wire enameling oven with an integral internal catalytic oxidizer, unit number HZ4A, installed April 1988, with a maximum rating of 62 pounds **of wire** per hour. Emissions shall be exhausted at stack/vent E-7.

(d) Three (3) SICME wire enameling ovens with an integral internal thermal oxidizer, unit numbers 281-282, 283-284 and 285-286, installed in late 1996, with a maximum rating of 183 pounds **of wire** per hour each. Emissions shall be exhausted at stack/vents D-3, D-4 and D-5, respectively.

(e) Three (3) MAG HSO wire enameling ovens with integral internal catalytic oxidizers, unit numbers 551 (installed in January 1992), 552 and 553 (both in stalled November 1994), with a maximum rating of 0.64 pounds **of wire** per hour each. Emissions shall be exhausted at stack/vents C-3, C-4 and C-5 respectively.

(f) Seven (7) MAG HS1 wire enameling ovens with integral internal catalytic oxidizers, unit numbers 561, 562, 563, 564, 565, 566 and 567, installed November 1994, with a maximum rating of 0.91 pounds **of wire** per hour each. Emissions shall be exhausted at stack/vents C-6, C-8, C-10, C-12, C-14, C-16 and C-18, respectively.

(g) One (1) Weather-Rite V-22 wire enameling oven with an integral internal thermal oxidizer, unit number 290, installed in late 1998, with a maximum rating of 810 pounds **of wire** per hour. Emissions shall be exhausted at stack/vent D-8.

(h) Eleven (11) Rea H-9 wire enameling ovens with external catalytic oxidizers, unit numbers 243, 244, 245, 246, 247, 248, 250, 251, 252, 253 and 254, with a maximum rating of 6 pounds **of wire** per hour each. Emissions from units 243, 244, 245 and 246, shall be exhausted at stack/vent F-6. Emissions from units 247, 248, 250, and 254 shall be

exhausted at stack/vent F-7. Emissions from units 251, 252, and 253 shall be exhausted at stack/vent F-8. Unit 243 was installed in June 1987. Unit 244 was installed in May 1987. Units 245 and 246 were installed in June 1989. Units 247 and 248 were installed in February 1992. Units 250 through 254 were installed in 1995.

(i) One (1) MOCO wire enameling oven with an external thermal oxidizer, unit number 260, installed before 1974, with a maximum rating of 429 pounds **of wire** per hour. Emissions shall be exhausted at stack/vent D-1.

(j) One (1) MOCO wire enameling oven with an external thermal oxidizer, unit number 270, installed before 1974, with a maximum rating of 571 pounds **of wire** per hour. Emissions shall be exhausted at stack/vent D-2.

(k) Six (6) Rea wire enameling ovens, unit numbers 540, 541, 542, 543, 544 and 550, installed before 1965, with a maximum rating of 0.26 pounds **of wire** per hour each. Emissions from units 540, 541, 542, 543 and 544 shall be exhausted at stack/vent C-2. Emissions from unit 550 shall be exhausted at stack/vent C-1.

(l) One (1) MOCO XR-1 experimental wire enameling oven with an integral internal catalytic oxidizer, installed before 1980. Emissions shall be exhausted at stack/vent E-3.

(m) Two (2) natural gas fired boilers with a maximum capacity of 16.7 million Btu per hour each, unit number PU4384 and CB266-500, installed before 1970. Emissions from the boilers shall be exhausted at stack/vent A-1 and A-2, respectively.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name:	Rea Magnet Wire Company
Source Location:	3600 Pontiac Street, Ft. Wayne, Indiana 46803
County:	Allen
SIC Code:	3357
Operation Permit No.:	T003-6959-00014
Permit Reviewer:	ERG/RM

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Rea Magnet Wire Company relating to the operation of magnet wire coating processes.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Two (2) GE-I wire enameling ovens with integral internal catalytic oxidizers, unit numbers 210-213 and 220-223, installed June 1989, with a maximum rating of 191 pounds per hour each. Emissions shall be exhausted at stack/vents F-1 and F-2, respectively.

(b) One (1) GE-M wire enameling oven with an integral internal catalytic oxidizer, unit number 230-237, installed June 1989, with a maximum rating of 508 pounds per hour each. Emissions shall be exhausted at stack/vent F-3.

(c) One (1) MAG HZ4A wire enameling oven with an integral internal catalytic oxidizer, unit number HZ4A, installed April 1988, with a maximum rating of 62 pounds per hour. Emissions shall be exhausted at stack/vent E-7.

(d) Three (3) SICME wire enameling ovens with an integral internal thermal oxidizer, unit numbers 281-282, 283-284 and 285-286, installed in late 1996, with a maximum rating of 183 pounds per hour each. Emissions shall be exhausted at stack/vents D-3, D-4 and D-5, respectively.

(e) Three (3) MAG HSO wire enameling ovens with integral internal catalytic oxidizers, unit numbers 551 (installed in January 1992), 552 and 553 (both in stalled November 1994), with a maximum rating of 0.64 pounds per hour each. Emissions shall be exhausted at stack/vents C-3, C-4 and C-5 respectively.

(f) Seven (7) MAG HS1 wire enameling ovens with integral internal catalytic oxidizers, unit numbers 561, 562, 563, 564, 565, 566 and 567, installed November 1994, with a maximum rating of 0.91 pounds per hour each. Emissions shall be exhausted at stack/vents C-6, C-8, C-10, C-12, C-14, C-16 and C-18, respectively.

(g) One (1) Weather-Rite V-22 wire enameling oven with an integral internal thermal oxidizer, unit number 290, installed in late 1998, with a maximum rating of 810 pounds per hour. Emissions shall be exhausted at stack/vent D-8.

(h) Eleven (11) Rea H-9 wire enameling ovens with external catalytic oxidizers, unit numbers 243, 244, 245, 246, 247, 248, 250, 251, 252, 253 and 254, with a maximum rating of 6 pounds per hour each. Emissions from units 243, 244, 245 and 246, shall be exhausted at stack/vent F-6. Emissions from units 247, 248, 250, and 254 shall be exhausted at stack/vent F-7. Emissions from units 251, 252, and 253 shall be exhausted at stack/vent F-8. Unit 243 was installed in June 1987. Unit 244 was installed in May 1987. Units 245 and 246 were installed in June 1989. Units 247 and 248 were installed in February 1992. Units 250 through 254 were installed in 1995.

(i) One (1) MOCO wire enameling oven with an external thermal oxidizer, unit number 260, installed before 1974, with a maximum rating of 429 pounds per hour. Emissions shall be exhausted at stack/vent D-1.

(j) One (1) MOCO wire enameling oven with an external thermal oxidizer, unit number 270, installed before 1974, with a maximum rating of 571 pounds per hour. Emissions shall be exhausted at stack/vent D-2.

(k) Six (6) Rea wire enameling ovens, unit numbers 540, 541, 542, 543, 544 and 550, installed before 1965, with a maximum rating of 0.26 pounds per hour each. Emissions from units 540, 541, 542, 543 and 544 shall be exhausted at stack/vent C-2. Emissions from unit 550 shall be exhausted at stack/vent C-1.

(l) One (1) MOCO XR-1 experimental wire enameling oven with an integral internal catalytic oxidizer, installed before 1980. Emissions shall be exhausted at stack/vent E-3.

(m) Two (2) natural gas fired boilers with a maximum capacity of 16.7 million Btu per hour each, unit number PU4384 and CB266-500, installed before 1970. Emissions from the boilers shall be exhausted at stack/vent A-1 and A-2, respectively.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during the review process.

New Emission Units and Pollution Control Equipment

There are no new facilities operating at this source during the review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Natural gas fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.

(b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 Btu per hour.

(c) The following VOC and HAP storage containers:

(1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.

(2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.

(d) Equipment used exclusively for the following:

(1) Packaging lubricants and greases.

(2) Filing drums, pails or other packaging containers with lubricating oils, waxes and greases.

(e) Machining where an aqueous cutting coolant continuously floods the machining interface.

(f) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(g) Cleaners and solvents characterized as follows:

(1) Having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100 F).

(h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(i) Closed loop heating and cooling systems.

(j) Any of the following structural steel and bridge fabrication activities:

(1) cutting 200,000 linear feet or less of one inch (1") plate or equivalent.

(2) Using 80 tons or less of welding consumables.

(k) Groundwater oil recovery wells.

(l) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(m) Any operation using aqueous solutions containing less than 1% by weight of VOCs excluding HAPs.

(n) Noncontact cooling tower systems with the following:

(1) Forced and induced draft cooling tower system not regulated under a NESHAP.

(o) Quenching operations used with treating processes.

(p) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(q) Heat exchanger cleaning and repair.

(r) Paved and unpaved roads and parking lots with public access.

(s) Asbestos abatement projects regulated by 326 IAC 14-10.

(t) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.

(u) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.

(v) Blowdown for any of the following: sight glass; boiler, compressors; pumps and cooling tower.

(w) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume.

(x) Purge double block and bleed valves.

(y) Filter or coalescer media changeout

(z) A laboratory as defined in 326 IAC 2-7-1(21)(D)

(aa) Other activities or categories not previously identified with emissions equal to or less than thresholds requiring listing only:

Lead (Pb) = 0.2 ton per year
Sulfur Dioxide (SO2) = 10 tons per year
Nitrogen Oxides (Nox) = 10 tons per year
Carbon Monoxide (CO) = 25 tons per year
Particulate Matter (PM) = 5 tons per year
Volatile Organic Compounds (VOC) = 5 tons per year for equipment with an air pollution control device to comply with a provision of 326 IAC 8.10 tons per year for all other equipment.
Single HAP = 1 ton per year
Combination of HAP = 2.5 tons per year
Hydrogen Sulfide (H_2S) = 5 tons per year
Total Reduced Sulfur (TRS) = 5 tons per year
Reduced Sulfur Compounds = 5 tons per year
Fluorides = 5 tons per year

(1) Enamel, Thinner and Solvent Storage Tanks
(2) Tin Electroplater
(3) Wastewater Evaporator
(4) BV glassline - glass coating line
(5) USM glassline -glass coating line
(6) Solvent distillation unit
(7) Superconductor stripper line
(8) Paint spray booth
(9) Cleaning containers
(10) dry lube applicators
(11) USM2 glassline - glass coating line
(12) Fenn Mill using mineral oil

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) OP 02-07-86-0604, issued on August 10, 1982;

(b) OP 02-07-90-0710, issued on December 1, 1989;

(c) CP 02-003-3297, issued on March 21, 1994;

(d) OP 02-07-86-0605, issued on August 10, 1982;

(e) PC (02) 551, issued October 2, 1973;

(f) PC (02) 1654, issued October 16, 1987;

(g) PC (02) 1751, issued June 5, 1989;

(h) CP 003-2959; issued March 25, 1993;

(i) CP 003-5731; issued July 9, 1993;

(j) Exemption issued on January 13, 1992;

(k) Registration issued on February 24, 1992;

(l) Exemption issued on October 24, 1994;

(m) Registration issued on May 22, 1987;

(n) Exemption issued on August 17, 1983;

(o) Exemption issued on March 29, 1988;

(p) RACT Petition CP 003-9913, issued on October 28, 1998 and

(q) Registration CP 003-10294-00014 issued on November 18, 1998.

All conditions from previous approvals were incorporated into this Part 70 permit.

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the VOC internal catalytic and thermal oxidizers be considered as an integral part of the wire coating process:

The VOCs will be oxidized using only the process heat supplied by the curing ovens.

IDEM, OAQ has evaluated the justifications and agreed that the catalytic and thermal oxidation systems will be considered as an integral part of the wire coating process. Therefore, the permitting level will be determined using the potential to emit after the internal catalytic and thermal VOC oxidation systems. Operating conditions in the proposed permit will specify that the catalytic and thermal VOC oxidation systems shall operate at all times when the wire coating process is in operation.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on October 21, 1996. Additional information was received on August 12, 1999.
A notice of completeness letter was mailed to the source on November 12, 1996.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (15 pages).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	less than 100
PM-10	less than 100
SO_2	less than 100
VOC	greater than 100, less than 250
CO	less than 100
NO_x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
cresols	less than 10
cumene	less than 10
ethylbenzene	less than 10
phenol	less than 10
toluene	less than 10
xylene	greater than 10
TOTAL	greater than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1996 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	0.449
PM-10	0.449
SO_2	0.090
VOC	50.121
CO	3.283
NO_x	15.730

Potential to Emit After Issuance

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

	Limited Potential to Emit						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
all ovens	----	----	----	less than 250 (tons/year)	—	—	greater than 25 tons/ year
boilers	0.8 lb/MMBtu	—	—	-----	—	----	---
Total Emissions	0.8 lb/MMBtu	—	—	less than 250 (tons/year)	—	—	—

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Allen County has been classified as attainment or unclassifiable for PM-10, SO_2, Ozone, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for prevention of Significant Deterioration (PSD) 326 IAC 2-2 and 40 CFR 52.21.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

The total source potential to emit of VOC are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 will not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities - Oven 290

326 IAC 8-2-8 (Magnet Wire Coating Operations)

Pursuant to 326 IAC 8-2-8 (Magnet Wire Coating Operations), the volatile organic compound (VOC) content of electrically insulating varnishes or enamel applied to aluminum or copper wire for use in electrical machinery shall be limited to 1.7 pounds VOC per gallon of coating less water delivered to the applicator.

The limit includes the evaporation of thinners being added to coatings to adjust viscosity, therefore, it is necessary to keep coating and solvent containers covered at all times to prevent solvent evaporation.

Based on calculations (appendix A), the source is in compliance with this rule.

Oven 290 must operate with an overall efficiency of not less than 95.77% at all times when the wire enameling ovens are in operation. This overall efficiency is necessary to ensure that 326 IAC 2-2 and 40 CFR 52.21 do not apply.

State Rule Applicability - Individual Facilities - Ovens 247, 248, 250, 251, 252, 253 and 254

326 IAC 8-1-5 (Site Specific RACT)

Pursuant to 326 IAC 8-1-5 and CP-003-9913-00014 issued October 28,1998, each H-9 magnet wire coating oven (units 247, 248, and 250 through 254) shall achieve the following:

(a) the VOC content of the coatings used shall not exceed 7.64 pounds per gallon coating as delivered to the applicator, excluding water,

(b) the catalyst shall be replaced once every six months to ensure that the catalytic oxidizer is achieving the required overall efficiency,

(c) VOC emissions shall be limited to 4.7 pounds of VOC per gallon of coating and 0.89 tons per year each,

(d) the capture system shall be operated in such a manner as to maintain an overall control efficiency of not less than 90%, and

(e) the capture system fan shall be operated at times when the ovens are in operation.

State Rule Applicability - Individual Facilities - Ovens 260 and 270

326 IAC 8-1-5 (Site Specific RACT)

Pursuant to 326 IAC 8-1-5 and CP-003-9913-00014 issued October 28, 1998, magnet wire coating ovens 260 and 270 shall permanently reduce VOC emissions by 85% of levels currently emitted. Each oven shall have the following corresponding limitations:

(a) The thermal oxidizer for oven unit 260 shall be operated at or above the temperature determined during compliance tests to maintain a minimum 85% overall efficiency.

(b) The thermal oxidizer for oven unit 270 shall be operated at or above the temperature determined during compliance tests to maintain a minimum 85% overall efficiency.

(c) The Permittee may utilize a lower temperature for oven units 260 and 270 if it performs VOC testing utilizing Method 25 (40 CFR 60, appendix A) for VOC or other methods as approved by the Commissioner to ensure compliance with the 85% overall efficiency at the lower temperature.

(d) The Permittee shall monitor the temperature for the thermal oxidizers for oven units 260 and 270 once per shift while the ovens are in operation.

State Rule Applicability - Individual Facilities - Ovens 243, 244, 245 and 246

326 IAC 8 Volatile Organic Compounds

Potential emissions are less than 25 tons per year. Therefore, 326 IAC 8-1-6 and 326 IAC 8-2-8 do not apply. Any change or modification which may increase the potential emission to 25 tons per year or more of volatile organic compounds must be approved by the Office of Air Quality before any such change may occur.

The limit includes the evaporation of thinners being added to coatings to adjust viscosity, therefore, it is necessary to keep coating and solvent containers covered at all times to prevent solvent evaporation.

State Rule Applicability - Individual Facilities - Ovens 281-282, 283-284, 285-286, 551, 552, 553, 561, 562, 563, 564, 565, 566, 567 and 549

326 IAC 8 Volatile Organic Compounds

Potential emissions are less than 15 pounds per day. Therefore, 326 IAC 8-2-8 will not apply. Any change or modification which may increase the potential emissions to 15 pounds per day or more of volatile organic compounds must be approved by the Office of Air Quality before any such change may occur.

This limit includes the evaporation of thinners being added to coatings to adjust viscosity, therefore, it is necessary to keep coating and solvent containers covered at all times to prevent solvent evaporation.

Ovens 281-282, 283-284 and 285-286 must operate with an overall efficiency of not less than 96% at all times when the wire enameling ovens are in operation. This overall efficiency is necessary to ensure that 326 IAC 8-2-8, 326 IAC 2-2 and 40 CFR 52.21 do not apply.

Ovens 551, 552, 553, 561, 562, 563, 564, 565, 566, and 567 are below 15 pounds per day without the effect of the catalytic oxidizers. Therefore, the permit does not include a condition for the oxidizers to be in operation at all times.

Oven 549 must operate with an overall efficiency of not less than 90.63% at all times when the wire enameling oven is in operation. This overall efficiency is necessary to ensure that 326 IAC 8-2-8, 326 IAC 2-2 and 40 CFR 52.21 do not apply.

State Rule Applicability - Individual Facilities - Ovens 210-213, 220-223, 230-237 and MAG HZ4A

326 IAC 8 Volatile Organic Compounds

Potential emissions are less than 25 tons per year. Therefore, 326 IAC 8-1-6 and 326 IAC 8-2-8 will not apply. Any change or modification which may increase the potential emissions to 25 tons per year or more of volatile organic compounds must be approved by the Office of Air Quality before any such change may occur.

This limit includes the evaporation of thinners being added to coatings to adjust viscosity, therefore, it is necessary to keep coating and solvent containers covered at all times to prevent solvent evaporation.

Ovens 210-213, 220-223, 230-237, and HZ4A must operate with an overall efficiency of not less than 80% at all times when the wire enameling ovens are in operation. This overall efficiency is necessary to ensure that 326 IAC 8-1-6, 326 IAC 8-2-8, 326 IAC 2-2 and 40 CFR 52.21 do not apply.

State Rule Applicability - Individual Facilities - Ovens 540, 541, 542, 543, 544, 550 and XR-1

These ovens were constructed prior to 1980, therefore there are no applicable requirements for these facilities other than those listed in Sections B and C of the Title V permit.

State Rule - Individual Facilities - Boilers

326 IAC 6-2-3 (Emission limitations for Sources of Indirect Heating)

Pursuant to 326 IAC 6-2-3, the PM emissions from the two 16.7 MMBtu per hour heat input natural gas fired boilers shall each be limited to 0.8 pounds per MMBtu heat input.

These boilers were constructed in 1950 and 1965. The boilers are in compliance with 326 IAC 6-2-3.

State Rule Applicability - Individual Facilities - Insignificant Activities

326 IAC 8-1-6 (New Facilities General Reduction Requirements)

The source uses mineral oil in the Fenn Mill and potential emissions are less than 25 tons per year of volatile organic compounds. Therefore, 326 IAC 8-1-6 does not apply. Any change or modification which may increase the potential emissions to 25 tons per year or more of volatile organic compounds, such as changing the solvent to mineral spirits, must be approved by the Office of Air Quality before any such change occurs.

326 IAC 8-3-2 (Cold Cleaner Operations)

The degreasing operations are subject to the requirements of 326 IAC 8-3-2. This rule requires that the cleaner be equipped with a cover and a facility for draining cleaned parts as well as that waste solvent be stored only in covered containers.

326 IAC 8-3-5 (Cold Cleaner Operation and Control)

The degreasing operations are subject to the requirements of 326 IAC 8-3-5(a). This rule requires that the owner and operator of a cold cleaner degreaser facility shall ensure that the degreaser is equipped with a cover that must be designed so that it can be easily operated with one (1) hand if certain conditions exist. The degreaser must be equipped with a facility for draining cleaned articles.

326 IAC 8 (Volatile Organic Compound Rules)

The surface coating operations and other uses of solvents in insignificant activities are not subject to any of the 326 IAC 8 rules because the emissions from these activities are less than 15 pounds per day and 25 tons per year.

326 IAC 6-3-2 (Process Operations)

The particulate matter from brazing equipment, cutting torches, soldering equipment, welding equipment, paint spray booth and BV, USM2, and USM glasscoating lines shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Testing Requirements

VOC emissions from the magnet wire ovens are calculated according to the methodology set out in the attached Appendix A: Emission Calculations. In order to comply with 326 IAC 8-2-8 or to demonstrate that VOC emissions are below the 326 IAC 8-2-8 applicability thresholds, the

oxidizers for ovens 281-282, 283-284, 285-286, 260, 270, 290, and 247 248 and 250 through 254 must operate at an efficiency of no less than between 90 and 96% depending on the oven. Both the claimed control efficiency and the control efficiency required to comply with 326 IAC 8-2-8 are greater than or equal to 85%. Therefore, performance testing is required to verify that the oxidizers are achieving the required control efficiency. Performance testing is also required for ovens 210-213, 220-223, 230-237, and HZ4A because their integral catalytic oxidizers are necessary to maintain PSD minor source status. One representative oven from each group of ovens will be tested once per permit term. The ovens have been grouped based on design, control efficiency, and temperature required. The ovens tested must not be an oven that has previously been tested.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. Wire coating ovens 281-282, 283-284, 285-286 and 290, have applicable compliance monitoring conditions as specified below:

   Compliance with the minimum temperature will be monitored by computer collected data generated continuously. Eight-hour average temperatures will be made available to IDEM upon request and one-hour temperatures records will be made available within five business days from request. The temperatures will be reported based on an eight-hour average. The ovens shall operate with a five (5) degree buffer such that if the eight-hour average temperature falls within five (5) degrees of the minimum required temperature, corrective action shall be performed and one-hour temperatures shall be investigated to determine if any temperature fell below the actual minimum temperature. If a one-hour temperature is less than the established minimum temperature, this will considered noncompliance.

2. Wire coating ovens 210-213, 220-223, 230-237, HZ4A, 243, 244, 245, 246, 551, 552, 553, 561, 562, 563, 564,565, 566 and 567 have applicable compliance monitoring conditions as specified below:

   The catalysts will be replaced once every twelve months to ensure the catalytic oxidizer is achieving the required overall efficiency.

3. Wire coating ovens 247, 248, 250, 251, 252, 253, and 254 have applicable complaince monitoring conditions as specified below:

The catalysts will be replaced once every six months to ensure the catalytic oxidizer is achieving the required overall efficiency.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Part 70 Application Form GSD-08.

(a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

(b) See attached calculations for detailed air toxic calculations.

Conclusion

The operation of this wire coating source shall be subject to the conditions of the attached proposed Part 70 Permit No. T003-6959-00014.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
10 < MM BTU/HR <100

Company Name: **Rea Magnet Wire Company**
Address City IN Zip: **3600 Pontiac Street, Ft. Wayne, Indiana**
Title V: **T003-6959**
Plt ID: **003-00014**
Reviewer: **Ron Melkis**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
16.7	146.5

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.6	0.6	0.0	7.3	0.4	6.2

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, and 1.4-2, SCC #1-02-006-02

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emissions Calculations
VOC and Particulate
Required efficiency for compliance with 326 IAC 8-2-8

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gal of coating less water	Pounds VOC per gallon of coating	Potential VOC lbs per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal Solids	Transfer Efficiency	integral control required efficie to comply with	Potential VOC after integral co lbs per day	Potential VOC after integral c tons per year
Worst case for oven 290	8.34	86.40%	0.0%	86.4%	0.0%	13.80%	0.01110	810.00	7.21	7.21	64.79	1554.89	283.77	0.00	52.22	100%	95.8%	65.81	12.01

Methodology

Required efficiency = (lb VOC/gal solids -E)/lb VOC/gal solids * 100
E= (1.7 lb VOC/gal of coating/(1-(1.7 lb VOC/gal of coating/7.36 lb VOC/gal coating solids)) = 2.21 lb VOC/gal of solids

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Ovens 210-213 and 220-223

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC lbs per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral control efficiency %	Potential VOC after integral control pounds per day	Potential VOC after integral control tons per year	Total Potential after integral c from oven tons per year	Total Potenti after integral from oven lbs per day
Oven 210-213 Coat 1	8.40	77.00%	0.0%	77.0%	0.0%	18.00%	0.00830	185.000	6.47	6.47	9.93	238.36	43.50	0.00	35.93	100%	80.00%	47.67	8.70	8.70	
Oven 210-213 coat 2 (basecoat)	8.88	61.00%	0.0%	61.0%	0.0%	35.10%	0.00340	143.000	5.42	5.42	2.63	63.21	11.54	0.00	15.43	100%	80.00%	12.64	2.31		
Oven 210-213 Coat 2 (topcoat)	8.32	86.00%	0.0%	86.0%	0.0%	13.00%	0.00430	143.000	7.16	7.16	4.40	105.59	19.27	0.00	55.04	100%	80.00%	21.12	3.85		
Oven 210-213 Coat 2 (bondcoat)	8.17	92.00%	0.0%	92.0%	0.0%	7.90%	0.00410	143.000	7.52	7.52	4.41	105.76	19.30	0.00	95.14	100%	80.00%	21.15	3.86	10.02	
Oven 210-213 coat 3 (basecoat)	8.70	76.00%	0.0%	76.0%	0.0%	17.00%	0.00730	149.000	6.61	6.61	7.19	172.60	31.50	0.00	38.89	100%	80.00%	34.52	6.30		
Oven 210-213 coat 3 (topcoat)	8.40	84.00%	0.0%	84.0%	0.0%	11.00%	0.00230	149.000	7.06	7.06	2.42	58.03	10.59	0.00	64.15	100%	80.00%	11.61	2.12	8.42	
Oven 210-213 coat 4 (basecoat)	8.88	61.00%	0.0%	61.0%	0.0%	35.10%	0.00430	191.000	5.42	5.42	4.45	106.77	19.49	0.00	15.43	100%	80.00%	21.35	3.90		
Oven 210-213 coat 4 (topcoat)	8.32	86.00%	0.0%	86.0%	0.0%	13.00%	0.00260	191.000	7.16	7.16	3.55	85.28	15.56	0.00	55.04	100%	80.00%	17.06	3.11	7.01	
Oven 210-213 coat 5 (basecoat)	8.70	76.00%	0.0%	76.0%	0.0%	17.00%	0.00600	112.00	6.61	6.61	4.44	106.64	19.46	0.00	38.89	100%	80.00%	21.33	3.89		
Oven 210-213 coat 5 (topcoat)	8.40	84.00%	0.0%	84.0%	0.0%	11.00%	0.00400	112.00	7.06	7.06	3.16	75.87	13.85	0.00	64.15	100%	80.00%	15.17	2.77		
Oven 210-213 Coat 5 (bondcoat)	8.86	83.00%	0.0%	83.0%	0.0%	8.70%	0.00210	112.000	7.35	7.35	1.73	41.51	7.58	0.00	84.53	100%	80.00%	8.30	1.52	8.18	
Oven 210-213 coat 6 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.00660	134.000	6.54	6.54	5.79	138.84	25.34	0.00	34.07	100%	80.00%	27.77	5.07		
Oven 210-213 coat 6 (topcoat)	8.86	83.00%	0.0%	83.0%	0.0%	8.70%	0.00207	134.000	7.35	7.35	2.04	48.96	8.93	0.00	84.53	100%	80.00%	9.79	1.79	6.85	
Oven 220-223 Coat 1	8.40	77.00%	0.0%	77.0%	0.0%	18.00%	0.00830	185.000	6.47	6.47	9.93	238.36	43.50	0.00	35.93	100%	80.00%	47.67	8.70	8.70	
Oven 220-223 coat 2 (basecoat)	8.88	61.00%	0.0%	61.0%	0.0%	35.10%	0.00340	143.000	5.42	5.42	2.63	63.21	11.54	0.00	15.43	100%	80.00%	12.64	2.31		
Oven 220-223 Coat 2 (topcoat)	8.32	86.00%	0.0%	86.0%	0.0%	13.00%	0.00430	143.000	7.16	7.16	4.40	105.59	19.27	0.00	55.04	100%	80.00%	21.12	3.85		
Oven 220-223 Coat 2 (bondcoat)	8.17	92.00%	0.0%	92.0%	0.0%	7.90%	0.00410	143.000	7.52	7.52	4.41	105.76	19.30	0.00	95.14	100%	80.00%	21.15	3.86	10.02	
Oven 220-223 coat 3 (basecoat)	8.70	76.00%	0.0%	76.0%	0.0%	17.00%	0.00730	149.000	6.61	6.61	7.19	172.60	31.50	0.00	38.89	100%	80.00%	34.52	6.30		
Oven 220-223 coat 3 (topcoat)	8.40	84.00%	0.0%	84.0%	0.0%	11.00%	0.00230	149.000	7.06	7.06	2.42	58.03	10.59	0.00	64.15	100%	80.00%	11.61	2.12	8.42	
Oven 220-223 coat 4 (basecoat)	8.88	61.00%	0.0%	61.0%	0.0%	35.10%	0.00430	191.000	5.42	5.42	4.45	106.77	19.49	0.00	15.43	100%	80.00%	21.35	3.90		
Oven 220-223 coat 4 (topcoat)	8.32	86.00%	0.0%	86.0%	0.0%	13.00%	0.00260	191.000	7.16	7.16	3.55	85.28	15.56	0.00	55.04	100%	80.00%	17.06	3.11	7.01	
Oven 220-223 coat 5 (basecoat)	8.70	76.00%	0.0%	76.0%	0.0%	17.00%	0.00600	112.00	6.61	6.61	4.44	106.64	19.46	0.00	38.89	100%	80.00%	21.33	3.89		
Oven 220-223 coat 5 (topcoat)	8.40	84.00%	0.0%	84.0%	0.0%	11.00%	0.00400	112.00	7.06	7.06	3.16	75.87	13.85	0.00	64.15	100%	80.00%	15.17	2.77		
Oven 220-223 Coat 5 (bondcoat)	8.86	83.00%	0.0%	83.0%	0.0%	8.70%	0.00210	112.000	7.35	7.35	1.73	41.51	7.58	0.00	84.53	100%	80.00%	8.30	1.52	8.18	
Oven 220-223 coat 6 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.00660	134.000	6.54	6.54	5.79	138.84	25.34	0.00	34.07	100%	80.00%	27.77	5.07		
Oven 220-223 coat 6 (topcoat)	8.86	83.00%	0.0%	83.0%	0.0%	8.70%	0.00207	134.000	7.35	7.35	2.04	48.96	8.93	0.00	84.53	100%	80.00%	9.79	1.79	6.85	
Total																				20.04	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Ovens 230-238

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC lbs per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral contr efficiency %	Potential VO after integral lbs per day	Potential VOC after integral c tons per year	Total Potenti after integral from oven tons per yea	Total Potenti after integral from oven lbs per day
Oven 230-238 Coat 1	8.72	87.00%	0.0%	87.0%	0.0%	7.60%	0.00800	338.000	7.59	7.59	20.51	492.33	89.85	0.00	99.82	100%	80.00%	98.47	17.97	17.97	
Oven 230-238 Coat 2	8.40	77.00%	0.0%	77.0%	0.0%	18.00%	0.00500	508.000	6.47	6.47	16.43	394.29	71.96	0.00	35.93	100%	80.00%	78.86	14.39	14.39	
Oven 230-238 Coat 3 (basecoat)	8.70	76.00%	0.0%	76.0%	0.0%	17.00%	0.00380	338.000	6.61	6.61	8.49	203.82	37.20	0.00	38.89	100%	80.00%	40.76	7.44		
Oven 230-238 coat 3 (topcoat)	8.40	84.00%	0.0%	84.0%	0.0%	11.00%	0.00012	338.000	7.06	7.06	0.29	6.87	1.25	0.00	64.15	100%	80.00%	1.37	0.25	7.69	
TOTAL																				17.97	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Oven HZ4A

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hou	Pounds VO per gallon of coating less water	Pounds V per gallon of coating	Potential VOC poun per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral co efficiency %	Potential VO after integra lbs per day	Potential VOC after integral tons per year	Total Pote after integ from oven tons per y	Total Pote after integ from oven lbs per da
Oven HZ4A coat 1	8.51	85.50%	0.0%	85.5%	0.0%	7.80%	0.02750	31.000	7.28	7.28	6.20	148.87	27.17	0.00	93.28	100%	80.00%	29.77	5.43	5.43	
Oven HZ4A Coat 2 (basecoat	8.90	65.00%	0.0%	65.0%	0.0%	35.10%	0.00960	62.000	5.79	5.79	3.44	82.64	15.08	0.00	16.48	100%	80.00%	16.53	3.02		
Oven HZ4A Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.01020	62.000	7.73	7.73	4.89	117.30	21.41	0.00	161.01	100%	80.00%	23.46	4.28		
Oven HZ4A Coat 2 (bondcoat	8.17	92.00%	0.0%	92.0%	0.0%	7.90%	0.01320	62.000	7.52	7.52	6.15	147.63	26.94	0.00	95.14	100%	80.00%	29.53	5.39	12.69	
Oven HZ4A Coat 3	8.90	65.00%	0.0%	65.0%	0.0%	35.10%	0.00950	62.000	5.79	5.79	3.41	81.78	14.92	0.00	16.48	100%	80.00%	16.36	2.98	2.98	
Oven HZ4A Coat 4 (basecoat	8.90	65.00%	0.0%	65.0%	0.0%	35.10%	0.00850	62.000	5.79	5.79	3.05	73.17	13.35	0.00	16.48	100%	80.00%	14.63	2.67		
Oven HZ4A Coat 4 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.00230	62.000	7.73	7.73	1.10	26.45	4.83	0.00	161.01	100%	80.00%	5.29	0.97	3.64	
Oven HZ4A Coat 5 (basecoat	9.50	60.30%	0.0%	60.3%	0.0%	19.00%	0.00680	62.000	5.73	5.73	2.42	57.96	10.58	0.00	30.15	100%	80.00%	11.59	2.12		
Oven HZ4A Coat 5 (topcoat)	8.53	80.50%	0.0%	80.5%	0.0%	14.00%	0.00320	62.000	6.87	6.87	1.36	32.70	5.97	0.00	49.05	100%	80.00%	6.54	1.19	3.31	
Oven HZ4A Coat 6	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.00870	56.000	6.54	6.54	3.19	76.49	13.96	0.00	34.07	100%	80.00%	15.30	2.79	2.79	
TOTAL																				12.69	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Ovens 281-282, 283-284, 285-286

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VO per gallon of coating less water	Pounds V per gallo of coatin	Potential VOC pour per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral co efficiency %	Potential VOC after integral c lbs per day	Potential VOC after integral co tons per year	Total Poten after integr from oven tons per ye	Total Poten after integra from oven lbs per day
Oven 281-282 Coat 1 (basecoat)	8.80	76.00%	0.0%	76.0%	0.0%	24.10%	0.00528	183.000	6.69	6.69	6.46	155.09	28.30	0.00	27.75	100%	96.00%	6.20	1.13		
Oven 281-282 Coat 1 (topcoat)	8.60	80.50%	0.0%	80.5%	0.0%	14.00%	0.00129	183.000	6.92	6.92	1.63	39.22	7.16	0.00	49.45	100%	96.00%	1.57	0.29	1.42	
Oven 281-282 Coat 2	8.54	85.40%	0.0%	85.4%	0.0%	13.80%	0.01002	155.000	7.29	7.29	11.33	271.96	49.63	0.00	52.85	100%	96.00%	10.88	1.99	1.99	10.88
Oven 283-284 Coat 1 (basecoat)	8.80	76.00%	0.0%	76.0%	0.0%	24.10%	0.00528	183.000	6.69	6.69	6.46	155.09	28.30	0.00	27.75	100%	96.00%	6.20	1.13		
Oven 283-284 Coat 1 (topcoat)	8.60	80.50%	0.0%	80.5%	0.0%	14.00%	0.00129	183.000	6.92	6.92	1.63	39.22	7.16	0.00	49.45	100%	96.00%	1.57	0.29	1.42	
Oven 283-284 Coat 2	8.54	85.40%	0.0%	85.4%	0.0%	13.80%	0.01002	155.000	7.29	7.29	11.33	271.96	49.63	0.00	52.85	100%	96.00%	10.88	1.99	1.99	10.88
Oven 285-286 Coat 1 (basecoat)	8.80	76.00%	0.0%	76.0%	0.0%	24.10%	0.00528	183.000	6.69	6.69	6.46	155.09	28.30	0.00	27.75	100%	96.00%	6.20	1.13		
Oven 285-286 Coat 1 (topcoat)	8.60	80.50%	0.0%	80.5%	0.0%	14.00%	0.00129	183.000	6.92	6.92	1.63	39.22	7.16	0.00	49.45	100%	96.00%	1.57	0.29	1.42	
Oven 285-286 Coat 2	8.54	85.40%	0.0%	85.4%	0.0%	13.80%	0.01002	155.000	7.29	7.29	11.33	271.96	49.63	0.00	52.85	100%	96.00%	10.88	1.99	1.99	10.88
							TOTAL													5.96	

METHODOLOGY
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Ovens 551, 552, 553

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hou	Pounds VO per gallon of coating less water	Pounds V per gallo of coatin	Potential VOC pour per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral co efficiency %	Potential VOC after integral c lbs per day	Potential VO after integral tons per year	Total Pote after integ from oven tons per y	Total Pote after integ from oven lbs per da
Oven 551 Coat 1	8.20	93.60%	0.0%	93.6%	0.0%	5.20%	0.12800	0.280	7.68	7.68	0.28	6.60	1.20	0.00	147.60	100%	80.00%	1.32	0.24	0.24	
Oven 551 Coat 2	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.05600	0.550	6.54	6.54	0.20	4.84	0.88	0.00	34.07	100%	80.00%	0.97	0.18	0.18	
Oven 551 Coat 3 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01380	0.550	5.65	5.65	0.04	1.03	0.19	0.00	26.90	100%	80.00%	0.21	0.04		
Oven 551 Coat 3 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.00690	0.550	7.73	7.73	0.03	0.70	0.13	0.00	161.01	100%	80.00%	0.14	0.03		
Oven 551 Coat 3 (bondcoat)	8.17	92.00%	0.0%	92.0%	0.0%	7.90%	0.06690	0.550	7.52	7.52	0.28	6.64	1.21	0.00	95.14	100%	80.00%	1.33	0.24	0.31	1.67
Oven 551 Coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.03300	0.460	6.62	6.62	0.10	2.41	0.44	0.00	34.83	100%	80.00%	0.48	0.09		
Oven 551 coat 4 (topcoat)	8.46	83.00%	0.0%	83.0%	0.0%	14.00%	0.01240	0.460	7.02	7.02	0.04	0.96	0.18	0.00	50.16	100%	80.00%	0.19	0.04	0.12	
Oven 551 coat 5 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.03280	0.640	6.00	6.00	0.13	3.02	0.55	0.00	28.57	100%	80.00%	0.60	0.11		
Oven 551 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.01540	0.640	7.73	7.73	0.08	1.83	0.33	0.00	161.01	100%	80.00%	0.37	0.07	0.18	
Oven 552 Coat 1	8.20	93.60%	0.0%	93.6%	0.0%	5.20%	0.12800	0.280	7.68	7.68	0.28	6.60	1.20	0.00	147.60	100%	80.00%	1.32	0.24	0.24	
Oven 552 Coat 2	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.05600	0.550	6.54	6.54	0.20	4.84	0.88	0.00	34.07	100%	80.00%	0.97	0.18	0.18	
Oven 552 Coat 3 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01380	0.550	5.65	5.65	0.04	1.03	0.19	0.00	26.90	100%	80.00%	0.21	0.04		
Oven 552 Coat 3 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.00690	0.550	7.73	7.73	0.03	0.70	0.13	0.00	161.01	100%	80.00%	0.14	0.03		
Oven 552 Coat 3 (bondcoat)	8.17	92.00%	0.0%	92.0%	0.0%	7.90%	0.06690	0.550	7.52	7.52	0.28	6.64	1.21	0.00	95.14	100%	80.00%	1.33	0.24	0.31	1.67
Oven 552 Coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.03300	0.460	6.62	6.62	0.10	2.41	0.44	0.00	34.83	100%	80.00%	0.48	0.09		
Oven 552 coat 4 (topcoat)	8.46	83.00%	0.0%	83.0%	0.0%	14.00%	0.01240	0.460	7.02	7.02	0.04	0.96	0.18	0.00	50.16	100%	80.00%	0.19	0.04	0.12	
Oven 552 coat 5 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.03280	0.640	6.00	6.00	0.13	3.02	0.55	0.00	28.57	100%	80.00%	0.60	0.11		
Oven 552 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.01540	0.640	7.73	7.73	0.08	1.83	0.33	0.00	161.01	100%	80.00%	0.37	0.07	0.18	
Oven 553 Coat 1	8.20	93.60%	0.0%	93.6%	0.0%	5.20%	0.12800	0.280	7.68	7.68	0.28	6.60	1.20	0.00	147.60	100%	80.00%	1.32	0.24	0.24	
Oven 553 Coat 2	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.05600	0.550	6.54	6.54	0.20	4.84	0.88	0.00	34.07	100%	80.00%	0.97	0.18	0.18	
Oven 553 Coat 3 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01380	0.550	5.65	5.65	0.04	1.03	0.19	0.00	26.90	100%	80.00%	0.21	0.04		
Oven 553 Coat 3 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.00690	0.550	7.73	7.73	0.03	0.70	0.13	0.00	161.01	100%	80.00%	0.14	0.03		
Oven 553 Coat 3 (bondcoat)	8.17	92.00%	0.0%	92.0%	0.0%	7.90%	0.06690	0.550	7.52	7.52	0.28	6.64	1.21	0.00	95.14	100%	80.00%	1.33	0.24	0.31	1.67
Oven 553 Coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.03300	0.460	6.62	6.62	0.10	2.41	0.44	0.00	34.83	100%	80.00%	0.48	0.09		
Oven 553 coat 4 (topcoat)	8.46	83.00%	0.0%	83.0%	0.0%	14.00%	0.01240	0.460	7.02	7.02	0.04	0.96	0.18	0.00	50.16	100%	80.00%	0.19	0.04	0.12	
Oven 553 coat 5 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.03280	0.640	6.00	6.00	0.13	3.02	0.55	0.00	28.57	100%	80.00%	0.60	0.11		
Oven 553 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.01540	0.640	7.73	7.73	0.08	1.83	0.33	0.00	161.01	100%	80.00%	0.37	0.07	0.18	
TOTAL																				0.92	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Ovens 561, 562, 563, 564, 565, 566, 567

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
PIt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC lbs per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral control efficiency %	Potential VOC after integral control lbs per day	Potential VOC after integral control tons per year	Total Potential VOC after integral control from oven tons per year	Total Potential VOC after integral control from oven lbs per day
Oven 561 coat 1	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.24990	0.260	7.61	7.61	0.49	11.87	2.17	0.00	146.34	100%	80.00%	2.37	0.43	0.43	2.37
Oven 561 Coat 2 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.05600	0.910	6.00	6.00	0.31	7.34	1.34	0.00	28.57	100%	80.00%	1.47	0.27		
Oven 561 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.02640	0.910	7.73	7.73	0.19	4.46	0.81	0.00	161.01	100%	80.00%	0.89	0.16	0.21	
Oven 561 coat 3	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.10300	0.440	6.54	6.54	0.30	7.11	1.30	0.00	34.07	100%	80.00%	1.42	0.26	0.26	
Oven 561 Coat 4 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.06650	0.130	6.54	6.54	0.06	1.36	0.25	0.00	34.07	100%	80.00%	0.27	0.05		
Oven 561 Coat 4 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.08460	0.130	7.70	7.70	0.08	2.03	0.37	0.00	88.51	100%	80.00%	0.41	0.07	0.12	
Oven 561 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.07490	0.700	6.62	6.62	0.35	8.33	1.52	0.00	34.83	100%	80.00%	1.67	0.30		
Oven 561 coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.02800	0.700	7.06	7.06	0.14	3.32	0.61	0.00	50.46	100%	80.00%	0.66	0.12	0.43	
Oven 562 coat 1	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.24990	0.260	7.61	7.61	0.49	11.87	2.17	0.00	146.34	100%	80.00%	2.37	0.43	0.43	2.37
Oven 562 Coat 2 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.05600	0.910	6.00	6.00	0.31	7.34	1.34	0.00	28.57	100%	80.00%	1.47	0.27		
Oven 562 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.02640	0.910	7.73	7.73	0.19	4.46	0.81	0.00	161.01	100%	80.00%	0.89	0.16	0.21	
Oven 562 coat 3	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.10300	0.440	6.54	6.54	0.30	7.11	1.30	0.00	34.07	100%	80.00%	1.42	0.26	0.26	
Oven 562 Coat 4 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.06650	0.130	6.54	6.54	0.06	1.36	0.25	0.00	34.07	100%	80.00%	0.27	0.05		
Oven 562 Coat 4 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.08460	0.130	7.70	7.70	0.08	2.03	0.37	0.00	88.51	100%	80.00%	0.41	0.07	0.12	
Oven 562 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.07490	0.700	6.62	6.62	0.35	8.33	1.52	0.00	34.83	100%	80.00%	1.67	0.30		
Oven 562 coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.02800	0.700	7.06	7.06	0.14	3.32	0.61	0.00	50.46	100%	80.00%	0.66	0.12	0.43	
Oven 563 coat 1	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.24990	0.260	7.61	7.61	0.49	11.87	2.17	0.00	146.34	100%	80.00%	2.37	0.43	0.43	2.37
Oven 563 Coat 2 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.05600	0.910	6.00	6.00	0.31	7.34	1.34	0.00	28.57	100%	80.00%	1.47	0.27		
Oven 563 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.02640	0.910	7.73	7.73	0.19	4.46	0.81	0.00	161.01	100%	80.00%	0.89	0.16	0.21	
Oven 563 coat 3	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.10300	0.440	6.54	6.54	0.30	7.11	1.30	0.00	34.07	100%	80.00%	1.42	0.26	0.26	
Oven 563 Coat 4 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.06650	0.130	6.54	6.54	0.06	1.36	0.25	0.00	34.07	100%	80.00%	0.27	0.05		
Oven 563 Coat 4 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.08460	0.130	7.70	7.70	0.08	2.03	0.37	0.00	88.51	100%	80.00%	0.41	0.07	0.12	
Oven 563 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.07490	0.700	6.62	6.62	0.35	8.33	1.52	0.00	34.83	100%	80.00%	1.67	0.30		
Oven 563 coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.02800	0.700	7.06	7.06	0.14	3.32	0.61	0.00	50.46	100%	80.00%	0.66	0.12	0.43	
Oven 564 coat 1	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.24990	0.260	7.61	7.61	0.49	11.87	2.17	0.00	146.34	100%	80.00%	2.37	0.43	0.43	2.37
Oven 564 Coat 2 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.05600	0.910	6.00	6.00	0.31	7.34	1.34	0.00	28.57	100%	80.00%	1.47	0.27		
Oven 564 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.02640	0.910	7.73	7.73	0.19	4.46	0.81	0.00	161.01	100%	80.00%	0.89	0.16	0.21	
Oven 564 coat 3	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.10300	0.440	6.54	6.54	0.30	7.11	1.30	0.00	34.07	100%	80.00%	1.42	0.26	0.26	
Oven 564 Coat 4 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.06650	0.130	6.54	6.54	0.06	1.36	0.25	0.00	34.07	100%	80.00%	0.27	0.05		
Oven 564 Coat 4 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.08460	0.130	7.70	7.70	0.08	2.03	0.37	0.00	88.51	100%	80.00%	0.41	0.07	0.12	
Oven 564 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.07490	0.700	6.62	6.62	0.35	8.33	1.52	0.00	34.83	100%	80.00%	1.67	0.30		
Oven 564 coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.02800	0.700	7.06	7.06	0.14	3.32	0.61	0.00	50.46	100%	80.00%	0.66	0.12	0.43	
Oven 565 coat 1	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.24990	0.260	7.61	7.61	0.49	11.87	2.17	0.00	146.34	100%	80.00%	2.37	0.43	0.43	2.37
Oven 565 Coat 2 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.05600	0.910	6.00	6.00	0.31	7.34	1.34	0.00	28.57	100%	80.00%	1.47	0.27		
Oven 565 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.02640	0.910	7.73	7.73	0.19	4.46	0.81	0.00	161.01	100%	80.00%	0.89	0.16	0.21	
Oven 565 coat 3	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.10300	0.440	6.54	6.54	0.30	7.11	1.30	0.00	34.07	100%	80.00%	1.42	0.26	0.26	
Oven 565 Coat 4 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.06650	0.130	6.54	6.54	0.06	1.36	0.25	0.00	34.07	100%	80.00%	0.27	0.05		
Oven 565 Coat 4 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.08460	0.130	7.70	7.70	0.08	2.03	0.37	0.00	88.51	100%	80.00%	0.41	0.07	0.12	
Oven 565 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.07490	0.700	6.62	6.62	0.35	8.33	1.52	0.00	34.83	100%	80.00%	1.67	0.30		
Oven 565 coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.02800	0.700	7.06	7.06	0.14	3.32	0.61	0.00	50.46	100%	80.00%	0.66	0.12	0.43	
Oven 566 coat 1	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.24990	0.260	7.61	7.61	0.49	11.87	2.17	0.00	146.34	100%	80.00%	2.37	0.43	0.43	2.37
Oven 566 Coat 2 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.05600	0.910	6.00	6.00	0.31	7.34	1.34	0.00	28.57	100%	80.00%	1.47	0.27		
Oven 566 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.02640	0.910	7.73	7.73	0.19	4.46	0.81	0.00	161.01	100%	80.00%	0.89	0.16	0.21	
Oven 566 coat 3	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.10300	0.440	6.54	6.54	0.30	7.11	1.30	0.00	34.07	100%	80.00%	1.42	0.26	0.26	
Oven 566 Coat 4 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.06650	0.130	6.54	6.54	0.06	1.36	0.25	0.00	34.07	100%	80.00%	0.27	0.05		
Oven 566 Coat 4 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.08460	0.130	7.70	7.70	0.08	2.03	0.37	0.00	88.51	100%	80.00%	0.41	0.07	0.12	
Oven 566 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.07490	0.700	6.62	6.62	0.35	8.33	1.52	0.00	34.83	100%	80.00%	1.67	0.30		
Oven 566 coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.02800	0.700	7.06	7.06	0.14	3.32	0.61	0.00	50.46	100%	80.00%	0.66	0.12	0.43	
Oven 567 coat 1	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.24990	0.260	7.61	7.61	0.49	11.87	2.17	0.00	146.34	100%	80.00%	2.37	0.43	0.43	2.37
Oven 567 Coat 2 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.05600	0.910	6.00	6.00	0.31	7.34	1.34	0.00	28.57	100%	80.00%	1.47	0.27		
Oven 567 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.02640	0.910	7.73	7.73	0.19	4.46	0.81	0.00	161.01	100%	80.00%	0.89	0.16	0.21	
Oven 567 coat 3	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.10300	0.440	6.54	6.54	0.30	7.11	1.30	0.00	34.07	100%	80.00%	1.42	0.26	0.26	
Oven 567 Coat 4 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.06650	0.130	6.54	6.54	0.06	1.36	0.25	0.00	34.07	100%	80.00%	0.27	0.05		
Oven 567 Coat 4 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.08460	0.130	7.70	7.70	0.08	2.03	0.37	0.00	88.51	100%	80.00%	0.41	0.07	0.12	
Oven 567 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.07490	0.700	6.62	6.62	0.35	8.33	1.52	0.00	34.83	100%	80.00%	1.67	0.30		
Oven 567 coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.02800	0.700	7.06	7.06	0.14	3.32	0.61	0.00	50.46	100%	80.00%	0.66	0.12	0.43	
TOTAL																				3.03	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Oven 290

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC lbs per hour	Potential VOC poun per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral co efficiency %	Potential VO after integra lbs per day	Potential VO after integra tons per yea	Total Poter after integra from oven tons per ye	Total Pote after integ from oven lbs per da
Oven 290 Coat 1 (basecoat)	8.80	76.00%	0.0%	76.0%	0.0%	24.10%	0.00528	810.000	6.69	6.69	28.60	686.48	125.28	0.00	27.75	100%	95.80%	28.83	5.26		
Oven 290 Coat 1 (topcoat)	8.60	80.50%	0.0%	80.5%	0.0%	14.00%	0.00129	810.000	6.92	6.92	7.23	173.61	31.68	0.00	49.45	100%	95.80%	7.29	1.33	6.59	
Oven 290 Coat 2	8.34	86.40%	0.0%	86.4%	0.0%	13.80%	0.01110	810.000	7.21	7.21	64.80	1555.31	283.84	0.00	52.22	100%	95.80%	65.32	11.92	11.92	65.32
TOTAL																				11.92	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Ovens 243-248, 250-254

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hou	Pounds V per gallon of coating less wate	Pounds VOC per gallon of coating	Potential VOC lbs per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral co efficiency %	Potential VOC after integral control lbs per day	Potential VOC after integral control tons per year	Total Potential VOC after integral control from oven tons per year	Total Potential after integral c from oven lbs per day
Oven 243 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	0.00%	44.58	8.14	8.14	
Oven 243 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	0.00%	29.83	5.44		
Oven 243 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	0.00%	11.65	2.13	7.57	
Oven 243 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	0.00%	19.03	3.47		
Oven 243 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	0.00%	23.98	4.38	7.85	
Oven 243 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	0.00%	21.36	3.90		
Oven 243 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	0.00%	10.88	1.99	5.88	
Oven 243 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	0.00%	7.02	1.28		
Oven 243 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	0.00%	2.25	0.41		
Oven 243 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	0.00%	16.96	3.10	4.79	
Oven 243 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	0.00%	6.91	1.26		
Oven 243 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	0.00%	2.92	0.53		
Oven 243 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	0.00%	10.48	1.91	3.71	
Oven 244 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	0.00%	44.58	8.14	8.14	
Oven 244 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	0.00%	29.83	5.44		
Oven 244 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	0.00%	11.65	2.13	7.57	
Oven 244 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	0.00%	19.03	3.47		
Oven 244 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	0.00%	23.98	4.38	7.85	
Oven 244 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	0.00%	21.36	3.90		
Oven 244 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	0.00%	10.88	1.99	5.88	
Oven 244 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	0.00%	7.02	1.28		
Oven 244 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	0.00%	2.25	0.41		
Oven 244 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	0.00%	16.96	3.10	4.79	
Oven 244 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	0.00%	6.91	1.26		
Oven 244 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	0.00%	2.92	0.53		
Oven 244 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	0.00%	10.48	1.91	3.71	
Oven 245 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	0.00%	44.58	8.14	8.14	
Oven 245 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	0.00%	29.83	5.44		
Oven 245 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	0.00%	11.65	2.13	7.57	
Oven 245 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	0.00%	19.03	3.47		
Oven 245 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	0.00%	23.98	4.38	7.85	
Oven 245 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	0.00%	21.36	3.90		
Oven 245 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	0.00%	10.88	1.99	5.88	
Oven 245 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	0.00%	7.02	1.28		
Oven 245 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	0.00%	2.25	0.41		
Oven 245 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	0.00%	16.96	3.10	4.79	
Oven 245 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	0.00%	6.91	1.26		
Oven 245 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	0.00%	2.92	0.53		
Oven 245 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	0.00%	10.48	1.91	3.71	
Oven 246 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	0.00%	44.58	8.14	8.14	
Oven 246 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	0.00%	29.83	5.44		
Oven 246 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	0.00%	11.65	2.13	7.57	
Oven 246 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	0.00%	19.03	3.47		
Oven 246 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	0.00%	23.98	4.38	7.85	
Oven 246 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	0.00%	21.36	3.90		
Oven 246 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	0.00%	10.88	1.99	5.88	
Oven 246 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	0.00%	7.02	1.28		
Oven 246 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	0.00%	2.25	0.41		
Oven 246 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	0.00%	16.96	3.10	4.79	
Oven 246 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	0.00%	6.91	1.26		
Oven 246 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	0.00%	2.92	0.53		
Oven 246 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	0.00%	10.48	1.91	3.71	
Oven 247 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	90.00%	4.46	0.81	0.81	
Oven 247 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	90.00%	2.98	0.54		
Oven 247 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	90.00%	1.16	0.21	0.76	
Oven 247 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	90.00%	1.90	0.35		
Oven 247 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	90.00%	2.40	0.44	0.78	
Oven 247 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	90.00%	2.14	0.39		
Oven 247 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	90.00%	1.09	0.20	0.59	
Oven 247 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	90.00%	0.70	0.13		
Oven 247 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	90.00%	0.23	0.04		
Oven 247 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	90.00%	1.70	0.31	0.48	
Oven 247 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	90.00%	0.69	0.13		
Oven 247 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	90.00%	0.29	0.05		
Oven 247 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	90.00%	1.05	0.19	0.37	
Oven 248 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	90.00%	4.46	0.81	0.81	
Oven 248 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	90.00%	2.98	0.54		
Oven 248 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	90.00%	1.16	0.21	0.76	
Oven 248 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	90.00%	1.90	0.35		
Oven 248 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	90.00%	2.40	0.44	0.78	
Oven 248 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	90.00%	2.14	0.39		

Oven 248 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	90.00%	1.09	0.20	0.59
Oven 248 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	90.00%	0.70	0.13	
Oven 248 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	90.00%	0.23	0.04	
Oven 248 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	90.00%	1.70	0.31	0.48
Oven 248 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	90.00%	0.69	0.13	
Oven 248 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	90.00%	0.29	0.05	
Oven 248 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	90.00%	1.05	0.19	0.37
Oven 250 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	90.00%	4.46	0.81	0.81
Oven 250 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	90.00%	2.98	0.54	
Oven 250 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	90.00%	1.16	0.21	0.76
Oven 250 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	90.00%	1.90	0.35	
Oven 250 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	90.00%	2.40	0.44	0.78
Oven 250 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	90.00%	2.14	0.39	
Oven 250 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	90.00%	1.09	0.20	0.59
Oven 250 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	90.00%	0.70	0.13	
Oven 250 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	90.00%	0.23	0.04	
Oven 250 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	90.00%	1.70	0.31	0.48
Oven 250 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	90.00%	0.69	0.13	
Oven 250 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	90.00%	0.29	0.05	
Oven 250 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	90.00%	1.05	0.19	0.37
Oven 251 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	90.00%	4.46	0.81	0.81
Oven 251 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	90.00%	2.98	0.54	
Oven 251 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	90.00%	1.16	0.21	0.76
Oven 251 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	90.00%	1.90	0.35	
Oven 251 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	90.00%	2.40	0.44	0.78
Oven 251 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	90.00%	2.14	0.39	
Oven 251 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	90.00%	1.09	0.20	0.59
Oven 251 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	90.00%	0.70	0.13	
Oven 251 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	90.00%	0.23	0.04	
Oven 251 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	90.00%	1.70	0.31	0.48
Oven 251 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	90.00%	0.69	0.13	
Oven 251 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	90.00%	0.29	0.05	
Oven 251 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	90.00%	1.05	0.19	0.37
Oven 252 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	90.00%	4.46	0.81	0.81
Oven 252 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	90.00%	2.98	0.54	
Oven 252 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	90.00%	1.16	0.21	0.76
Oven 252 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	90.00%	1.90	0.35	
Oven 252 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	90.00%	2.40	0.44	0.78
Oven 252 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	90.00%	2.14	0.39	
Oven 252 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	90.00%	1.09	0.20	0.59
Oven 252 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	90.00%	0.70	0.13	
Oven 252 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	90.00%	0.23	0.04	
Oven 252 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	90.00%	1.70	0.31	0.48
Oven 252 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	90.00%	0.69	0.13	
Oven 252 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	90.00%	0.29	0.05	
Oven 252 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	90.00%	1.05	0.19	0.37
Oven 253 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	90.00%	4.46	0.81	0.81
Oven 253 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	90.00%	2.98	0.54	
Oven 253 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	90.00%	1.16	0.21	0.76
Oven 253 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	90.00%	1.90	0.35	
Oven 253 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	90.00%	2.40	0.44	0.78
Oven 253 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	90.00%	2.14	0.39	
Oven 253 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	90.00%	1.09	0.20	0.59
Oven 253 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	90.00%	0.70	0.13	
Oven 253 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	90.00%	0.23	0.04	
Oven 253 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	90.00%	1.70	0.31	0.48
Oven 253 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	90.00%	0.69	0.13	
Oven 253 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	90.00%	0.29	0.05	
Oven 253 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	90.00%	1.05	0.19	0.37
Oven 254 Coat 1	8.84	92.00%	0.0%	92.0%	0.0%	6.70%	0.22840	1.000	8.13	8.13	1.86	44.58	8.14	0.00	121.39	100%	90.00%	4.46	0.81	0.81
Oven 254 Coat 2 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.05500	4.000	5.65	5.65	1.24	29.83	5.44	0.00	26.90	100%	90.00%	2.98	0.54	
Oven 254 Coat 2 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.01570	4.000	7.73	7.73	0.49	11.65	2.13	0.00	63.87	100%	90.00%	1.16	0.21	0.76
Oven 254 Coat 3 (basecoat)	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.02020	6.000	6.54	6.54	0.79	19.03	3.47	0.00	34.07	100%	90.00%	1.90	0.35	
Oven 254 Coat 3 (topcoat)	8.86	88.00%	0.0%	88.0%	0.0%	14.00%	0.02136	6.000	7.80	7.80	1.00	23.98	4.38	0.00	55.69	100%	90.00%	2.40	0.44	0.78
Oven 254 coat 4 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.02690	5.000	6.62	6.62	0.89	21.36	3.90	0.00	34.83	100%	90.00%	2.14	0.39	
Oven 254 coat 4 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.01251	5.000	7.25	7.25	0.45	10.88	1.99	0.00	77.10	100%	90.00%	1.09	0.20	0.59
Oven 254 coat 5 (basecoat)	8.07	70.00%	0.0%	70.0%	0.0%	21.00%	0.01726	3.000	5.65	5.65	0.29	7.02	1.28	0.00	26.90	100%	90.00%	0.70	0.13	
Oven 254 coat 5 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	12.10%	0.00405	3.000	7.73	7.73	0.09	2.25	0.41	0.00	63.87	100%	90.00%	0.23	0.04	
Oven 254 coat 5 (bondcoat)	8.14	81.30%	0.0%	81.3%	0.0%	7.90%	0.03560	3.000	6.62	6.62	0.71	16.96	3.10	0.00	83.77	100%	90.00%	1.70	0.31	0.48
Oven 254 coat 6 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.01450	3.000	6.62	6.62	0.29	6.91	1.26	0.00	34.83	100%	90.00%	0.69	0.13	
Oven 254 coat 6 (topcoat)	8.35	86.80%	0.0%	86.8%	0.0%	9.40%	0.00560	3.000	7.25	7.25	0.12	2.92	0.53	0.00	77.10	100%	90.00%	0.29	0.05	
Oven 254 coat 6 (bondcoat)	8.75	88.00%	0.0%	88.0%	0.0%	8.70%	0.01890	3.000	7.70	7.70	0.44	10.48	1.91	0.00	88.51	100%	90.00%	1.05	0.19	0.37

TOTAL	38.26
Ovens 243-246	32.56
Ovens 247-248, 250-254	5.70

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Oven 260

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VO per gallon of coating less water	Pounds VO per gallon of coating	Potential VOC lbs per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral co efficiency %	Potential VOC after integral co lbs per day	Potential VOC after integral c tons per year	Total Potential after integral c from oven tons per year	Total Potent after integra from oven lbs per day
Oven 260 Coat 1 (basecoat)	8.80	76.00%	0.0%	76.0%	0.0%	24.10%	0.00528	357.000	6.69	6.69	12.61	302.56	55.22	0.00	27.75	100%	85.00%	45.38	8.28		
Oven 260 Coat 1 (topcoat)	8.60	80.50%	0.0%	80.5%	0.0%	14.00%	0.00129	357.000	6.92	6.92	3.19	76.52	13.96	0.00	49.45	100%	85.00%	11.48	2.09	10.38	
Oven 260 Coat 2	8.34	86.40%	0.0%	86.4%	0.0%	13.80%	0.01110	429.000	7.21	7.21	34.32	823.74	150.33	0.00	52.22	100%	85.00%	123.56	22.55	22.55	
TOTAL																				22.55	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Oven 270

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC lbs per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral cont efficiency %	Potential VOC after integral c lbs per day	Potential VOC after integral con tons per year	Total Potential after integral c from oven tons per year	Total Potential after integral c from oven lbs per day
Oven 270 Coat 1 (basecoat)	8.80	76.00%	0.0%	76.0%	0.0%	24.10%	0.00528	476.000	6.69	6.69	16.81	403.41	73.62	0.00	27.75	100%	85.00%	60.51	11.04		
Oven 270 Coat 1 (topcoat)	8.60	80.50%	0.0%	80.5%	0.0%	14.00%	0.00129	476.000	6.92	6.92	4.25	102.02	18.62	0.00	49.45	100%	85.00%	15.30	2.79	13.84	
Oven 270 Coat 2	8.34	86.40%	0.0%	86.4%	0.0%	13.80%	0.01110	571.000	7.21	7.21	45.68	1096.40	200.09	0.00	52.22	100%	85.00%	164.46	30.01	30.01	
TOTAL																				30.01	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
VOC Emissions from Ovens 540-544, 550

Company Name: Rea Magnet Wire Company
Address: 3600 Pontiac Street, Ft. Wayne, Indiana
Title V: T003-6959
Plt ID: 003-00014
Reviewer: Ron Melkis

Material	Density (Lb/Gal)	Weight % Volatile (H20& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC lbs per hour	Potential VOC lbs per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency	integral control efficiency %	Potential VOC after integral control lbs per day	Potential VOC after integral control tons per year	Total Potential VOC after integral control from oven tons per year	Total Potential VOC after integral control from oven lbs per day
Oven 540 Coat 1	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.04130	0.260	6.54	6.54	0.07	1.69	0.31	0.00	34.07	100%		1.69	0.31	0.31	
Oven 540 Coat 2	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.05400	0.220	7.61	7.61	0.09	2.17	0.40	0.00	146.34	100%		2.17	0.40	0.40	
Oven 540 Coat 3 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.02900	0.260	6.00	6.00	0.05	1.09	0.20	0.00	28.57	100%		1.09	0.20		
Oven 540 Coat 3 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.37190	0.260	7.73	7.73	0.75	17.93	3.27	0.00	161.01	100%		17.93	3.27	3.47	
Oven 540 Coat 4 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.01400	0.130	6.00	6.00	0.01	0.26	0.05	0.00	28.57	100%		0.26	0.05		
Oven 540 Coat 4 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.00320	0.130	7.73	7.73	0.00	0.08	0.01	0.00	161.01	100%		0.08	0.01		
Oven 540 Coat 4 (bondcoat)	8.30	81.30%	0.0%	81.3%	0.0%	7.90%	0.00680	0.130	6.75	6.75	0.01	0.14	0.03	0.00	85.42	100%		0.14	0.03	0.09	
Oven 540 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.03370	0.260	6.62	6.62	0.06	1.39	0.25	0.00	34.83	100%		1.39	0.25		
Oven 540 Coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.01260	0.260	7.06	7.06	0.02	0.56	0.10	0.00	50.46	100%		0.56	0.10	0.36	
Oven 541 Coat 1	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.04130	0.260	6.54	6.54	0.07	1.69	0.31	0.00	34.07	100%		1.69	0.31	0.31	
Oven 541 Coat 2	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.05400	0.220	7.61	7.61	0.09	2.17	0.40	0.00	146.34	100%		2.17	0.40	0.40	
Oven 541 Coat 3 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.02900	0.260	6.00	6.00	0.05	1.09	0.20	0.00	28.57	100%		1.09	0.20		
Oven 541 Coat 3 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.37190	0.260	7.73	7.73	0.75	17.93	3.27	0.00	161.01	100%		17.93	3.27	3.47	
Oven 541 Coat 4 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.01400	0.130	6.00	6.00	0.01	0.26	0.05	0.00	28.57	100%		0.26	0.05		
Oven 541 Coat 4 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.00320	0.130	7.73	7.73	0.00	0.08	0.01	0.00	161.01	100%		0.08	0.01		
Oven 541 Coat 4 (bondcoat)	8.30	81.30%	0.0%	81.3%	0.0%	7.90%	0.00680	0.130	6.75	6.75	0.01	0.14	0.03	0.00	85.42	100%		0.14	0.03	0.09	
Oven 541 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.03370	0.260	6.62	6.62	0.06	1.39	0.25	0.00	34.83	100%		1.39	0.25		
Oven 541 Coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.01260	0.260	7.06	7.06	0.02	0.56	0.10	0.00	50.46	100%		0.56	0.10	0.36	
Oven 542 Coat 1	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.04130	0.260	6.54	6.54	0.07	1.69	0.31	0.00	34.07	100%		1.69	0.31	0.31	
Oven 542 Coat 2	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.05400	0.220	7.61	7.61	0.09	2.17	0.40	0.00	146.34	100%		2.17	0.40	0.40	
Oven 542 Coat 3 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.02900	0.260	6.00	6.00	0.05	1.09	0.20	0.00	28.57	100%		1.09	0.20		
Oven 542 Coat 3 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.37190	0.260	7.73	7.73	0.75	17.93	3.27	0.00	161.01	100%		17.93	3.27	3.47	
Oven 542 Coat 4 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.01400	0.130	6.00	6.00	0.01	0.26	0.05	0.00	28.57	100%		0.26	0.05		
Oven 542 Coat 4 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.00320	0.130	7.73	7.73	0.00	0.08	0.01	0.00	161.01	100%		0.08	0.01		
Oven 542 Coat 4 (bondcoat)	8.30	81.30%	0.0%	81.3%	0.0%	7.90%	0.00680	0.130	6.75	6.75	0.01	0.14	0.03	0.00	85.42	100%		0.14	0.03	0.09	
Oven 542 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.03370	0.260	6.62	6.62	0.06	1.39	0.25	0.00	34.83	100%		1.39	0.25		
Oven 542 Coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.01260	0.260	7.06	7.06	0.02	0.56	0.10	0.00	50.46	100%		0.56	0.10	0.36	
Oven 543 Coat 1	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.04130	0.260	6.54	6.54	0.07	1.69	0.31	0.00	34.07	100%		1.69	0.31	0.31	
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Oven 543 Coat 3 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.02900	0.260	6.00	6.00	0.05	1.09	0.20	0.00	28.57	100%		1.09	0.20		
Oven 543 Coat 3 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.37190	0.260	7.73	7.73	0.75	17.93	3.27	0.00	161.01	100%		17.93	3.27	3.47	
Oven 543 Coat 4 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.01400	0.130	6.00	6.00	0.01	0.26	0.05	0.00	28.57	100%		0.26	0.05		
Oven 543 Coat 4 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.00320	0.130	7.73	7.73	0.00	0.08	0.01	0.00	161.01	100%		0.08	0.01		
Oven 543 Coat 4 (bondcoat)	8.30	81.30%	0.0%	81.3%	0.0%	7.90%	0.00680	0.130	6.75	6.75	0.01	0.14	0.03	0.00	85.42	100%		0.14	0.03	0.09	
Oven 543 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.03370	0.260	6.62	6.62	0.06	1.39	0.25	0.00	34.83	100%		1.39	0.25		
Oven 543 Coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.01260	0.260	7.06	7.06	0.02	0.56	0.10	0.00	50.46	100%		0.56	0.10	0.36	
Oven 544 Coat 1	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.04130	0.260	6.54	6.54	0.07	1.69	0.31	0.00	34.07	100%		1.69	0.31	0.31	
Oven 544 Coat 2	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.05400	0.220	7.61	7.61	0.09	2.17	0.40	0.00	146.34	100%		2.17	0.40	0.40	
Oven 544 Coat 3 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.02900	0.260	6.00	6.00	0.05	1.09	0.20	0.00	28.57	100%		1.09	0.20		
Oven 544 Coat 3 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.37190	0.260	7.73	7.73	0.75	17.93	3.27	0.00	161.01	100%		17.93	3.27	3.47	
Oven 544 Coat 4 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.01400	0.130	6.00	6.00	0.01	0.26	0.05	0.00	28.57	100%		0.26	0.05		
Oven 544 Coat 4 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.00320	0.130	7.73	7.73	0.00	0.08	0.01	0.00	161.01	100%		0.08	0.01		
Oven 544 Coat 4 (bondcoat)	8.30	81.30%	0.0%	81.3%	0.0%	7.90%	0.00680	0.130	6.75	6.75	0.01	0.14	0.03	0.00	85.42	100%		0.14	0.03	0.09	
Oven 544 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.03370	0.260	6.62	6.62	0.06	1.39	0.25	0.00	34.83	100%		1.39	0.25		
Oven 544 Coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.01260	0.260	7.06	7.06	0.02	0.56	0.10	0.00	50.46	100%		0.56	0.10	0.36	
Oven 550 Coat 1	9.01	72.60%	0.0%	72.6%	0.0%	19.20%	0.04130	0.260	6.54	6.54	0.07	1.69	0.31	0.00	34.07	100%		1.69	0.31	0.31	
Oven 550 Coat 2	8.20	92.80%	0.0%	92.8%	0.0%	5.20%	0.05400	0.220	7.61	7.61	0.09	2.17	0.40	0.00	146.34	100%		2.17	0.40	0.40	
Oven 550 Coat 3 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.02900	0.260	6.00	6.00	0.05	1.09	0.20	0.00	28.57	100%		1.09	0.20		
Oven 550 Coat 3 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.37190	0.260	7.73	7.73	0.75	17.93	3.27	0.00	161.01	100%		17.93	3.27	3.47	
Oven 550 Coat 4 (basecoat)	8.57	70.00%	0.0%	70.0%	0.0%	21.00%	0.01400	0.130	6.00	6.00	0.01	0.26	0.05	0.00	28.57	100%		0.26	0.05		
Oven 550 Coat 4 (topcoat)	8.31	93.00%	0.0%	93.0%	0.0%	4.80%	0.00320	0.130	7.73	7.73	0.00	0.08	0.01	0.00	161.01	100%		0.08	0.01		
Oven 550 Coat 4 (bondcoat)	8.30	81.30%	0.0%	81.3%	0.0%	7.90%	0.00680	0.130	6.75	6.75	0.01	0.14	0.03	0.00	85.42	100%		0.14	0.03	0.09	
Oven 550 Coat 5 (basecoat)	8.92	74.20%	0.0%	74.2%	0.0%	19.00%	0.03370	0.260	6.62	6.62	0.06	1.39	0.25	0.00	34.83	100%		1.39	0.25		
Oven 550 Coat 5 (topcoat)	8.46	83.50%	0.0%	83.5%	0.0%	14.00%	0.01260	0.260	7.06	7.06	0.02	0.56	0.10	0.00	50.46	100%		0.56	0.10	0.36	
TOTAL																				20.83	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
VOC and Particulate
Summary of VOC Emissions from All Ovens

Company Name: **Rea Magnet Wire Company**
Address: **3600 Pontiac Street, Ft. Wayne, Indiana**
Title V: **T003-6959**
Plt ID: **003-00014**
Reviewer: **Ron Melkis**

Oven	VOC Uncontrolled Potential to Emit (tpy)[1]	VOC Potential to Emit (tpy)[2]
210-213, 220-223	20.04	20.04
+230-237	17.97	17.97
HZ4A	12.69	12.69
281-282, 283-284, 285-286	5.96	5.96
551, 552, 553	0.92	0.92
561, 562, 563, 564, 565, 566, 567	3.03	3.03
290	11.92	11.92
+243-248, 250-254	89.51	38.26
260	150.33	22.55
270	200.09	30.01
540, 541, 542, 543, 544, 550	20.83	20.83
TOTAL		**184.18**

[1] Includes integral controls
[2] Includes integral and non-integral controls